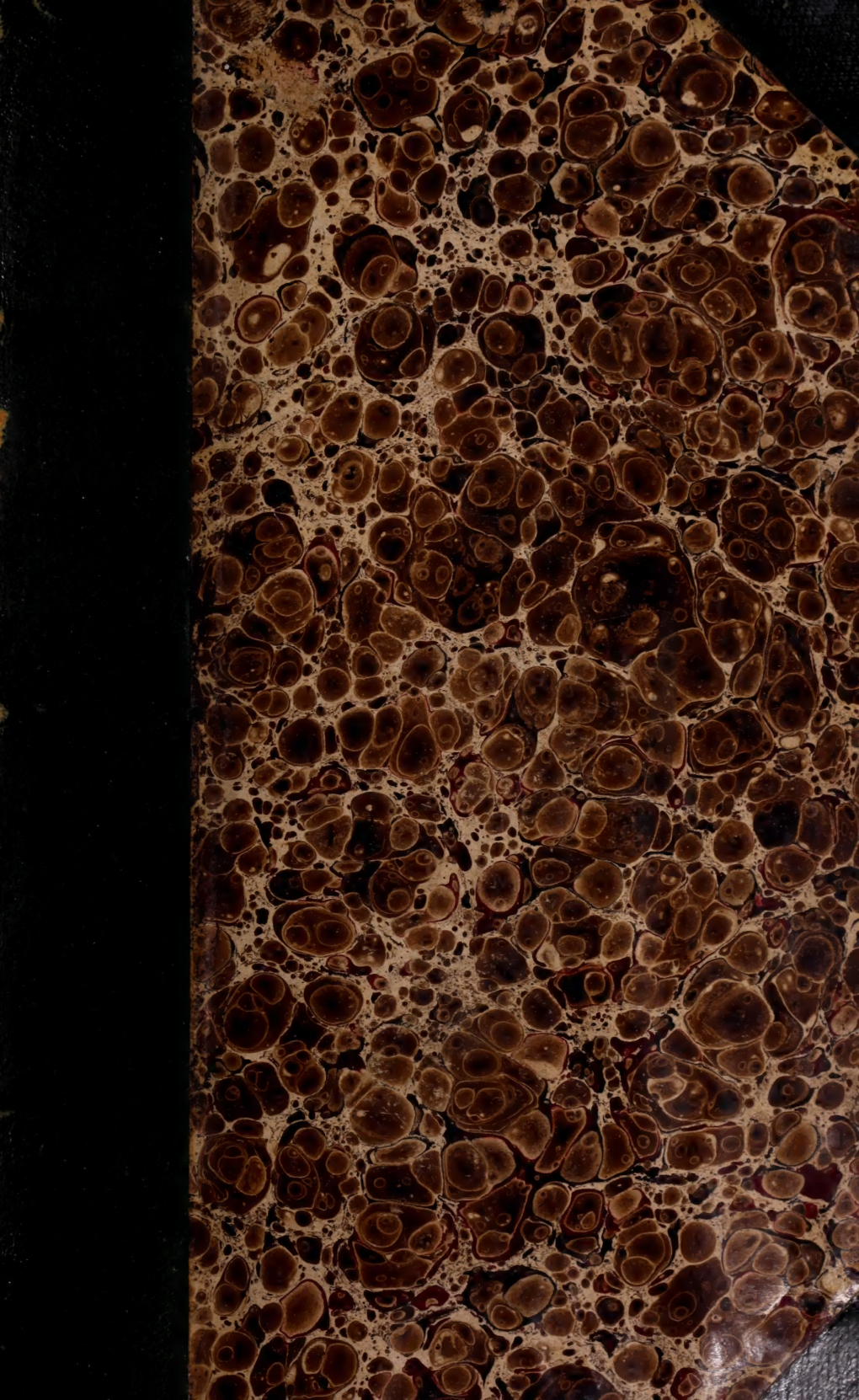
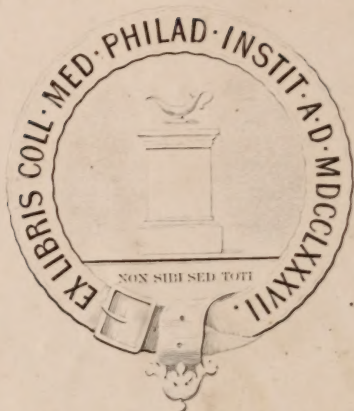




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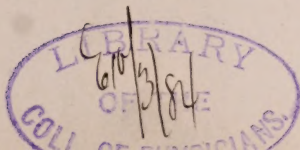
P. W. VAN PEYMA, M. D.

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No. 1.

Original Communications.

THE PRACTICAL UTILIZATION OF OZONE IN THE TREATMENT
OF DISEASE.*

BY F. W. BARTLETT, M. D.

Mr. President, and Members of the Association—While it would be interesting to review, fully, the history of ozone and give due credit to all illustrious scientists who have contributed to our knowledge of it, time will only permit me to make a very brief summary of what we may be fairly said to know of this mysterious component of the atmosphere. Referred to by Homer in the *Odyssey* and *Iliad* as the “Odor of thunderbolts,” it has been repeatedly described as a sulphurous vapor, noticeable in thunder storms and certain conditions of the atmosphere.

Dr. Cornelius B. Fox, of London, England, has summarized these observations in the opening chapter of his admirable work upon ozone, and from it I shall largely quote.

The first observation recorded of the peculiar smell of ozone artificially produced, was by Van Marum, of Holland, about 1785, who, having passed electric sparks through oxygen, discovered by Priestly in 1774, observed the odor we call ozone,

* Read before the Buffalo Medical Association, June 12, 1883.

and also that the gas thus produced oxidized mercury. Cavallo, early in this century, noticed that electrified air had a purifying effect upon animal and vegetable matter when decomposing, and employed it as a disinfecting wash in fetid ulcers.

In 1826 Dr. John Davy recognized it in the atmosphere and published a formula for the preparation of chemical tests for its detection.

In 1839, Christian Frederick Schonbein, Professor of Chemistry at Basle, and the inventor of gun-cotton, while engaged in some experiments on the decomposition of water by voltaic electricity, was astonished at the development of a peculiar odor similar to that emitted during discharges from the electrical machine. He showed that it was due to the existence of a body possessing, like oxygen, the property of most readily entering into chemical combinations. His announcement of this, and subsequent communications, drew the attention of the scientific world to the remarkable properties of this rediscovered body which he named ozone, from a Greek word signifying "to emit an odor."

During the forty years which have since elapsed, most of the scientists of the century have studied ozone, and I only refrain from giving their names and special discoveries from lack of space. Over and above them all, by common consent, towers the name of Schonbein, whose preliminary discoveries invited attention to its study, and whose zeal never wavered till his grand genius passed on to that illimitable existence where all mysteries are explained.

Ozone has been named "electricized oxygen," "allotropic oxygen," "nascent oxygen," "active oxygen," excited oxygen."

Omitting much that has been claimed and thereby neglecting deserved honors to many eminent explorers, it must suffice to say that the present accepted theory of the nature of ozone is that it is oxygen in a highly electrified state and possessing oxidizing qualities not found in ordinary oxygen. The formula of oxygen being O_2 , Dr. Odling thinks that the molecule of

ozone contains three atoms of oxygen and that its formation means the condensation of oxygen into two-thirds its former volume. It may be described as oxygen *plus* force. It is never obtained in a pure form, but always mixed with a certain proportion of oxygen. Ozone reverts slightly to ordinary oxygen at 100° Fahrenheit and wholly at 237° F. It is produced by various forms of electric apparatus, among which may be mentioned those of Siemens, Beanes, Ladd, and Houzeau; by the electrolysis of water, by phosphorus partially immersed in water, by the action of strong sulphuric acid upon potassium permanganate, by dispersing water in a pulverized form through the air, by the introduction of a hot glass rod into a vessel of air through which the vapor of ether has been diffused, and by the slow oxidation from exposure to light of sulphuric ether, chloroform, oil of turpentine, lemons, linseed, cinnamon, bergamot and most essential oils. The turpentine sold in the shops often contains fifty per cent. of its volume of one of these oxidizing principles. Whenever a chemical reaction takes place in the air ozone is said to be produced. It is insoluble in solutions of the acids and alkalies, alcohol, ether, essential oils and water. It is stated by Andrews to be three and one-half times heavier than oxygen. It acts upon most substances as an oxidizing agent of great power, converting indigo into isatine, the black into the white sulphate of lead, the yellow ferro-cyanide into the red cyanide of potassium; arsenic, antimony, iron, manganese, zinc, tin, lead, bismuth, silver, nickel and mercury, are all oxidized by it. It also transforms many of the lower oxides into peroxides. Schonbein states that nitrites may be changed into nitrates by ozone *only*.

Its corrosive powers and property of destroying most organic substances are remarkable; concentrated, it excels chlorine itself. Wood, straw, cork, starch, vegetable colors, rubber, pure and galvanized, fats, alcohol and albumen, are oxidized by this agent. It is said to be absorbed by the blood corpuscles with great rapidity. It possesses the quality of oxidizing putrid ex-

halations. In illustration, the following experiment performed by Drs. Wood and Richardson is given in Dr. Fox's work: "In 1854, a pint of the blood of an ox, coagulated, was exposed to the air until it was quite putrid and the clot was softening. At the close of the year, the clot having re-dissolved, as a result of alkaline decomposition, the blood was a most offensive fluid. In 1862, the fluid was found to be so offensive as to produce nausea when the gases evolved from it were inhaled. Drs. Wood and Richardson subjected it to a current of ozone from Siemens' apparatus; gradually the offensive smell passed away and the fluid blood became quite sweet. The dead blood, moreover, coagulated as the products of decomposition were removed, and so perfectly, that a new clot exuded serum."

Into the consideration of antozone, an element said to be always present when ozone is formed, I do not propose, for want of time, to enter. It affords, of itself, a curious study, and perhaps may be properly considered a peroxide of hydrogen.

We come now to the important question, does the atmosphere contain ozone? In 1865, the French Academy of Sciences appointed a committee to ascertain whether it existed in the atmosphere, if any tests would reliably prove its existence, or could be discovered. This committee differed in their conclusions, but the experiments of Schonbein, Houzeau, Andrews and Fox, seem to settle the question in the affirmative.

At the Agricultural College, Lansing, Michigan, the following test is employed: Ten parts starch, two hundred parts water; heating till the starch gelatinizes, and then dissolving in this one part of pure iodide of potassium. This paste is then spread evenly with a flat brush on sheets of paper free from sizing, which are rapidly dried by stove heat, without exposure to sunlight, and then stored up in a covered jar and kept from exposure to light. The starch, water and iodide of potassium must be pure. This paper, moistened, is exposed to the air, and the amount of ozone present is estimated as it changes from white to dark brown.

Ozone, liquefied under pressure, has an intense blue color. It is more abundant in winter and spring than in summer and autumn, probably, from less organic decomposition. Statements have been made as to the power of ozone upon germs, but, upon this point, Dr. Fell will enlighten you.

"It is said cloth goods will not dye when ozone is absent from the air, and that the effect of thunder storms in increasing the power of the mordant is remarkable." Dust storms increase coloration of tests but slightly.

Ozone is more abundant in days of rain, also of snow, with southern winds than northern, and from the sea. Dr. Witherill noted abundance of ozone in the public grounds at Washington at night, but none in the streets. At Amiens Cathedral, the higher the tests were hung the greater the discoloration. It is always absent from the air of inhabited rooms, hospitals, prisons, etc. The growth and vigor of plants has been said by Mr. Carey Lea to be affected by ozone, and I find that in sick rooms, where ozone is used, plants almost invariably shed their leaves. I have attributed this to the destruction of the carbonic acid, so important to plant respiration, by the ozone. Plants furnish ozone by daylight, but not at night.

Dr. Kedzie, Prof. of Chemistry, Agricultural College, Lansing, Mich., says: "Ozone oxidizes all the metals except gold and the platinum group. It instantly burns phosphuretted hydrogen; oxidizes hydrochloric acid so that it will dissolve gold leaf; oxidizes iodide of potassium, setting free the iodide and forming caustic potash; sets free bromine; will also oxidize the deadly carbonic oxide into the comparatively innocent carbon dioxide or carbonic acid. Carbonic oxide is one of the most deadly gases known. It gives no warning of its presence by its odor. The power of ozone to oxidize this deadly poison is a fact of prime importance. Ozone will instantly destroy the horrible smell of rotten eggs. Schonbein found that air, made foul by exposure one minute to four ounces of highly putrid meat, was disinfected by an equal quantity of air containing one part ozone in 3,240,000 parts of air."

Ozone has an irritating effect upon the mucous surfaces of the throat, when highly concentrated, and has been thought, when in excess in the atmosphere, to produce influenza.

The reports by various physicians upon the supposed effect of ozone in the atmosphere, in the causation of epidemics, are too loose and contradictory to establish anything in this direction. The evidence, however, is in favor of an atmosphere with high ozone readings. Dr. Ireland has made many experiments on animals with ozonized air. He states that ozonized air accelerates the respiration, and, we may infer, the circulation.

Ozonized air excites the nervous system. Animals may be subjected to a considerable proportion of ozone without serious injury, but, in the end, ozone produces effects which may continue after its withdrawal and cause them to die. Dr. Swartzenburg has arrived at a similar conclusion. He found that a rabbit made to breathe air mixed with only one-two-thousandths of its weight of ozone would die in two hours. Pigeons exhibit a greater tolerance, while frogs resist it completely, so long as they are supplied with water. An air so charged with ozone would be an *irrespirable* air and would affect with varying intensity all who breathed it. The odor of ozone is so powerful that one-millionth of it in the air is said to have a decided smell of the gas. The air of the country is said by Houzeau, to contain not more than one-four-hundred-and-fifty-thousandth of its weight or one-seven-hundred-thousandth of its volume. The density of ozone is one-six-hundred-and-eighty-five-one-thousandth. The conclusions regarding ozone, says Dr. Fox, may be confidently summarized as follows:

"1st. A deficiency of ozone in the air in all probability predisposes to disease, particularly in the epidemic form, by virtue of the depressing and debilitating effect of such air in consequence of its feeble power of oxidizing animal debris.

"2d. A permanent diminution in the normal amount of active oxygen favors the development of chronic diseases characterized by mal-nutrition, imperfect oxidation and degenera-

tion of tissues." Prof. Polli has shown that a dove will live longer in an atmosphere composed solely of ozone than in confined air which is vitiated by its own emanations.

Ozone abounds on the windward, and is deficient on the leeward side of cities, and is probably used up in the destruction of organic matters.

I omit description of various ozonoscopes and test papers for estimating ozone in the atmosphere as not within the intent of this paper.

Thus much of the history of ozone, the opinions of physicians and scientists upon its nature, its existence in the atmosphere in varying degree and the means used for its detection. So far we have no mention of its utilization, as artificially produced, in the treatment of zymotic disease, nor can I find, by diligent inquiry, that it has been systematically employed for this purpose. Compelled, then, to submit my own experience and to claim for it originality, I hope not to offend by egotistical pretensions or to be improperly influenced by enthusiasm.

In the month of October, 1876, I had the honor to read a paper before this association with similar caption to that now used. In it I detailed my experiments with ozone, artificially produced, with reports of forty cases treated in air thus modified. I claimed remarkably successful results in cases of peculiar severity and invited the association to use the crude apparatus exhibited. I felt then that my ideas would seem utopian and that I should be left to prosecute, individually, further trial of ozone. Nearly seven years have since passed away, and with the added results of 2,000 cases of disease treated in ozonized air, I again bring the subject before you. These cases are *essentially* zymotic, comprising scarlet fever, diphtheria, whooping-cough, typhoid and malarial fever, phthisis, hay fever, measles, dysentery, influenza, pneumonia, etc. All have been treated by simple exposure of the patients to air more or less ozonized and persistently or intermittingly employed.

In diphtheria the mortality has been five per cent.; in scarlet fever four per cent.; in typhoid fever ten per cent.; in whooping-cough, mortality none; measles, none; hay fever, none; phthisis, relief; dysentery, none. It is only in general terms that I make this statement. To be more specific I will cite illustrative cases: The first case treated by me in ozonized air was a child of Mr. G. M., Butler street, in 1876, born with a bright scarlatina rash. I immediately placed it in a strongly ozonized air, with no expectation of a favorable result, as such cases invariably die. The child, however, kept up a diaphragmatic jerk for thirty-six hours, when regular respiration was established, and it recovered with the usual desquamation and no sequelæ. An older child had been under treatment for two weeks, in ordinary atmosphere, and had a tedious convalescence, with cervical swellings and otitis. No medicine was given the case first cited.

Two weeks later, I was called to attend a child, aged three years, of Mr. C., Georgia street, for diphtheria, a truly malignant case. Had been ill three days; fauces covered, and posterior and anterior nares filled by the exudate; face purple; deglutition impossible, and symptoms of impending convulsions. Predicted speedily fatal termination, but proposed, for the possible benefit of four other children compelled to occupy the same apartment, the use of ozone. Consent given, a generator was placed close by the head of the child, and proto-iodide hydrarg. given in one-fourth grain doses every three hours. Convulsions occurred every three or four hours for four days, the child being in a comatose condition in the interim. At the end of that time consciousness was partially restored, convulsive action ceased, the exudate was sufficiently loosened to be removed from the nostril, and the child recovered. The other members of the family, six in number, remained exempt from the disease. As further illustration of the apparent value of ozone in limiting the spread of scarlatina, the following cases may be cited: Mrs. B., residing on Peach street, had a child aged seven years taken, in November, 1879, with scarlatina maligna. Six other children

were simultaneously exposed. The residence was an ordinary small one-story cottage, containing five rooms, two being bedrooms. In one of these the child was placed with special ozone generation, and a generator was also placed in the dining-room adjoining the bed-room. The children were confined to the front room, except at meal time, when, the door of the sick room being closed, they took their meals in the dining-room. With these precautions, all escaped the disease, and the patient made a good recovery. Mrs. H., residing on Oak street near Eagle, had child taken with scarlet fever in the summer of 1879. Directed isolation in upper front room of two-story house, mother to nurse, and no one else to be admitted to the room. Ozone used; child recovered; no other cases. Two years later, disease appeared in same family (medical attendant not known to me) and three patients, about two, eleven and eighteen years of age, died. I can go on for hours with reports of cases successfully treated in ozonized air, but time will not permit. Rather let me specify the general effects apparently following its use:

1st. Upon the throat in diphtheria: and here let me say, that I rarely modify a diphtheritic exudate by topical applications, except by insufflation of pulverized chloride of sodium as recommended by me in a paper read before the association, I think in 1872. Lately, I add to this quinine and sulphur. Usually, I do nothing more locally, except to subject the throat to the action of ozone. Liquefaction takes place promptly and fetor is almost always entirely suppressed. The exudate usually disappears—in mild cases always—by the third day, and, as a rule, there is no secondary return. The general treatment is not novel and need not be described.

In scarlet fever the object is to change the atmosphere as fully as possible, but especially locally, as the general cutaneous surface affords an outlet to the poison. In typhoid fever, general ozonization, isolation, and purification of water and fluids ingested. Whooping-cough is treated by ozonization and the

effects are in many cases truly surprising. I cite a special case : A child of a family residing on Tupper street, near Virginia, was brought to my office by the mother, and while there had a paroxysm of such severity that I thought respiration must cease. Expostulating with the mother for exposing the child, she said she expected death at any spasm and dare not leave the house without the child. Cough had existed for about three weeks. Was placed that night in ozonized air and had no paroxysm for twenty-four hours, and convalesced, with two other children similarly affected, very rapidly.

In hay fever results are usually, but not invariably, favorable ; in asthma, doubtful ; in dysentery, valuable by the favorable disinfection and deodorizing of the apartment ; in croup, membranous and diphtheric, no certain advantage. In three cases of puerperal fever, where a generator was placed within the covering of the bed, there was prompt removal of foul odors and the patients recovered, but whether this was due to the local disinfection, may be doubted.

I have introduced ozone into the treatment of eight cases of phthisis pulmonalis, all in advanced stages, without expectation of cure, but in all there was lessening of cough, perspiration, diarrhoea, and in no one of them was there local or general œdema before dissolution. They all professed to be relieved by it and asked for its continuance. In two cases of semile gangrene it was signally useful as a disinfectant of rooms occupied by patients. But, far more with the well than the sick are the good effects of ozone observable. That it is the most powerful destroyer of the volatile elements of contagion known to our art I have no doubt. I have never known a second case of typhoid fever to occur in a house when one was treated in ozonized air unless the period of apparent incubation was reached before the first case was treated ; nor the second case of diphtheria. Of scarlet fever I cannot speak so confidently, and yet, if I can obtain a fair isolation of the first child attacked, I expect to limit the cases to that. But I can say with great confidence that

with hardly an exception cases subsequent to the first are greatly diminished in severity.

I have seen a case of malignant scarlet fever, fatal in thirty-six hours, the child rolling in convulsions, in its liquid excrements, succeeded in forty-eight hours by a second case of same nature, but perfectly amenable to treatment, though the disease was prolonged for weeks; and a third case in same family so slightly ill as to call for no treatment, and the fourth and youngest escape altogether. We may be prepared for such statements when we read that recent experiments show that the bacteria from the malignant pustule itself may be rendered harmless when propagated for a few hours in pure and free air.

I quote from a paper read May 10, 1883, before the Polytechnic Association of the American Institute, by William C. Conant:

"The most wonderful achievement of recent investigation reveals a philosophy of both bane and antidote that astonishes us with its simplicity as much as with its efficiency. At the moment when humanity stands aghast at the announcement that germs are not destroyed by disinfectants, comes the counter discovery that they are rendered harmless by oxygen. It seems that it makes no difference, really, of what sort or from what source are the bacteria that we take into the blood. The only material difference to us depends on the sort of atmosphere in which their hourly generations are bred. For example, the bacteria developed in confined air, from a simple infusion of hay, are found by experiment to be as capable of generating that most terrible of blood poisoners, the malignant pustule, as are the bacteria taken from the pustule itself.

"On the other hand, the bacteria from the malignant pustule itself, after propagating for a few hours in pure and free air, become a perfectly harmless race, and are actually injected into the blood with impunity. The explanation of the strange discovery is this—note its extreme simplicity—bacteria bred in copious oxygen perish for want of it as soon as they enter the

blood vessels; whereas those inured to an unventilated atmosphere for a few generations, which means only a few hours, are prepared to thrive and propagate infinitely within our veins; and that is the whole mystery of blood poisoning and zymotic diseases."

When we consider that these minute organisms are stated by eminent microscopists to swarm in the blood by millions, estimated by Mr. Dancer at 3,700,000 in the breath of a human being in a single hour, over 60,000 a minute and 2,000 in a single breath, propagating in the blood and consuming its oxygen, we may well doubt the efficacy of any antidote, internally administered, which has proved externally to the body to have no effect. We are drawn irresistibly to the study of the treatment of disease by modified atmospheres, not necessarily ozone, but volatilized, respirable or irrespirable agents.

The next decade will witness a marvelous advance in this splendid field of experiment, and by and by we shall wonder at our ignorance and blindness in confining, practically, all our efforts in the cure of disease to remedies administered by the stomach. As surely as to-morrow comes, this shall come.

Thanks to the discoveries of Pasteur, Tyndall, Koch, and the long list of noble men who, though not of our profession, have incalculably benefited it by their researches, we shall ultimately cure all zymotic diseases.

While ozone may not be justly claimed a direct reinforcement to human vitality, it indirectly aids it by diminishing the influence of zymotic poisons. While it is doubtless true that concentrated ozone will destroy life in the mammalia, I would reason thus: it may be so employed in disease as to be harmless, and yet destructive to minute microscopic disease germs. Again, I argue that its admitted oxidizing power, by modifying an atmosphere favorable to *generating* germs, may largely or entirely prevent further propagation, or so modify the germ that it may be innocuous. All experiments prove that zymotic diseases lose their virulence as we rise to higher altitudes until,

as Tyndall's experiments show, we may expose the ordinary test infusions without the possibility of fertilization.

To what is this due? certainly not to *temperature* alone. Ozone is most abundant in the upper atmosphere, and by its specific gravity is constantly descending to combine with oxidizable gases and materials. I find by experiment that I can remove all foul odors in a cellar by locating a generator in the second or third story of a building. I only reiterate the opinion of Fox and all specialists in the study of ozone, that it should be diffused in all crowded and unwholesome hospitals, schools, prisons, mines; in all places where ordinary atmosphere is unequal to needed purification. I believe it to be entirely practical to ozonize the outer atmosphere of a plague-smitten city, and proposed in the recent yellow fever epidemics to do this in New Orleans and Memphis, but my ideas were deemed utopian. I patiently wait for time to do justice to the correctness of my opinions. I expect to show that not only in zymotic, but in what we term constitutional disease, ozone will surpass all present remedial agents; not only by direct action through the respiration, but by its wonderful influence upon remedial agents circulating in the blood. Ozone attacks metallic mercury with great promptness. May it not do the same while it, or its oxides, is within the body? I know it will oxidize what is known as amalgam, or soft filling, in dental cavities. It is, temporarily at least, a powerful aphrodisiac, which would indicate a stimulating effect upon the nervous system. I believe in disease it lessens the pulse and lowers vital temperature, but this I cannot assert. Many of my experiments have been made under such unfavorable environments—for instance, in filthy abodes where the ozone developed was so rapidly absorbed by previously existing putrescence, that it was exceedingly difficult to measure its value; but in experiments I intend soon to make in insulated receptacles, I hope to give more exact results. We must be patient—the mysteries which environ the study of ozone are immense.

Six years ago, at the suggestion of the late Dr. White, of this city, a committee was appointed, by the American Medical Association, to study and report upon ozone. Unless something definite was reported at the last meeting, nothing has been accomplished. Obtain, if it is possible, undoubted tests of the degree of ozonization in the atmosphere at all times, of what practical utility will it be in the treatment of disease? "Canst thou bind the sweet influences of Pleiades, or loose the bands of Orion?" Can you train this splendid corsair of the atmosphere, and make it subservient to your will? Can you really credit it with sufficient power, as it exists normally, to specially modify an existing disease? Has it not been tolerated, through all the ages, without exerting anything more than a purifying, oxidizing influence; perfectly compatible with the existence of localized putrescence and impurity?

And yet, there is confident expectation of something to be revealed. "The air is sweet with prophecies." The great army of explorers knows no rest. Day by day, it advances its lines, it establishes its posts, its camp fires gleam in the distance. Personally, I have no doubt, that the deadly fever of the tropics, the stealthy typhoid of civilization, the malarias of the swamps, the terror of maternity, puerperal fever, scarlatina, diphtheria, variola, even the dreaded cholera may be controlled or modified by oxidizing atmospheres; nor should we deem anything impossible in these days of illimitable progress. We "paint with the sunbeam," hold converse by the lightning's flash, and leap with the jubilant spirit of the waters from zone to zone. We know the anatomy of the microscopic inhabitants of the ocean's floor, and the spectral splendors of the sun. Deep under the dividing tides, on the great sympathetic nerves of the world, quiver and pass the thoughts, the aspirations, the events of all the continents. We shall persevere! We shall battle! We shall triumph! till,

"Standing on what too long we bore,
With shoulders bent and downcast eyes,
We may perceive, unseen before,
The path to higher mysteries."

Selections.

SOME OBSERVATIONS ON THE SALIVARY DIGESTION OF STARCH BY INFANTS.*

BY J. M. KEATING, M. D.†

Visiting Obstetrician to the Philadelphia Hospital, and Lecturer on Diseases of Women
and Children.

Recently, in a late English work, I find the following: "During the first few months farinaceous food of every kind should be avoided, for the child's stomach (?) cannot digest it. Until the third month, or even later, no saliva is secreted, and without this floury foods cannot be assimilated."† This idea is so prevalent, and most of us have adopted the statement as representing the teaching of physiologists, that it has always been a matter of surprise to those interested in the feeding of infants to find occasionally, especially amongst the poorer classes, infants fed upon corn starch or other farina, almost to the exclusion of other food, and thrive.

At present we presume that amylaceous material has of necessity to be converted by hydration into glucose, and for this reason I will not detain you this evening by indulging in the more speculative aspect of this subject, as to whether dextrose is capable of being absorbed, and which of the two ferments, that of the salivary glands or of the pancreas, is of the most importance. We have left this matter for further investigation. Prof. Albert R. Leeds, in his very able *expose* of the subject of foods as regards their chemical constituents, made the matter so clear that in his table of the analyses we have evidently an accurate guide for the selection of foods in individual cases. But as the general belief is that for infants of a tender age our choice should fall on that which contains a minimum quantity of starch, and a maximum amount of vegetable albuminoids, or foods based on the Liebig formula, I

* Read before the College of Physicians of Philadelphia, June 6, 1883.

† Management of Infants, etc., by Howard Barrett.

deemed it valuable to institute a series of experiments, the result of which I confess were rather surprising, to test the saliva of infants, and to satisfy myself that the reason why some children apparently thrive on starchy food is not due to any change in the starch in its preparation, but depended upon contact with secretions well established in childhood.

In these tests we endeavored, as far as possible, to exclude all error. Corn-starch was used, it having been previously boiled, cooled into a paste, and portions of this was put into little linen bags, and given to infants to suck for two minutes at a time. Pavy's test was then used; the corn-starch paste exhibited before the experiment no evidence of sugar change.

The linen was thoroughly boiled without discoloration of the solution. The bags with their contents were in each case thrown into a test-tube, and I submit for your examination the accompanying report :

Child's Name.	Age.	No. of Teeth.	Food.	Reaction.	No. of Experiments.
Smith....	6 days.....	0	Breast	None	3
Coyle	7 days.....	0	Breast.....	Marked.....	1
Gallagar ..	11 days.....	0	Breast.....	Well marked..	2
Asbulson..	12 days.....	0	Breast	Marked.....	1
Perry	2 weeks....	0	Breast	?	1
McErwin..	3 weeks....	0	Breast and crackers.....	Well marked	3
Meenan....	3 weeks....	0	Bottle	Perceptible ..	2
Conner....	4 weeks....	0	Breast.....	Marked.....	2
Davis.....	4 weeks....	0	Breast.....	Marked.....	1
Beatty....	4 weeks....	0	Breast	Very slight...	2
Sumley ...	4 weeks....	0	Breast.....	Marked.....	1
McCann ...	4 weeks....	0	Breast.....	Very marked..	1
Newhouse.	7 weeks....	0	Breast.....	Very slight...	2
Roberts ...	2 months...	1	Breast	Marked	2
Nerain	2 months...	0	Breast.....	Very marked..	1
Boeuning..	2 months...	0	Breast.....	Marked.....	1
Hemileth..	4 months...	2	Corn-starch and crackers.	Well marked..	2
Roach	5 months...	1	Corn-starch and crackers.	Slight ...	3
Hall	8 months...	2	Breast and crackers.	Marked	1
Devine ...	13 months...	4	Corn-starch and crackers.	Well marked..	1
Wood	17 months...		Condensed milk.....	None	

To the resident physicians of the Philadelphia Hospital, Drs. B. F. Hawley and A. E. Roussel, I am indebted for assistance in this matter, as many of these tests were repeated a number of times by them, and great care was used to insure accuracy. My report includes the results obtained by experiments with the saliva of twenty-one children, varying in age from six days to seventeen months. The sugar change was noted in all but three—one of these was a babe six days old—whilst in another babe seven days old a marked reaction was observed. I feel satisfied that some infants do digest starch provided it is presented to them in a digestible form, and also that the salivary secretion, which occurs earlier than we have been accustomed to believe, is allowed to come in contact with it, and I cannot but attribute the many statements to the effect that starchy food in small quantities is contra-indicated to the fact that the secretions of the mouth are less liable to exert their influence when such food is administered by bottle and deposited in a surprisingly short time in the acid juices of the stomach. If starchy food, such as barley-flour, oatmeal, rice, wheat-flour, etc., is indicated on account of its highly nutritious qualities which exist in all portions of the grain and deemed advisable in the feeding of children, our few observations teach us that they should be administered in such a way as to insure their thorough digestion, and I am satisfied that the surprising results we witness, especially among the poor, of thriving table-fed babes, is due to the mode of feeding more than to the fact that they are exceptional and astonishing cases. My table shows that the age of the infant is not a guide to the quality of its saliva, and we should bear this in mind when choosing the form of food. Thus, should we be called upon to regulate an infant's feeding, it would be important for us to test the saliva.

If we find a sugar change taking place we might incorporate with milk small quantities of one of the cereals, either barley, oatmeal, or wheat. On the contrary, should the test prove negative, Horlick's or Mellin's food would be decidedly prefer-

able. But while thoroughly convinced that the saliva is a most important element in digestion we cannot overlook the fact that starchy foods have also to run the gauntlet of the pancreas, which organ, if it possess in childhood relatively the same power that it does in latter years, is far more active than the salivary glands. We cannot, then, overlook the value of a microscopic examination of the stools of all bottle-fed children, for I believe that by this alone we can regulate the quantity of farinaceous food, detecting the proportion of the undigested residue.

The following are my conclusions :

The saliva of some infants possesses the property of converting starch into glucose, regardless of age.

The age of the infants cannot be taken as an indication of this property of its saliva.

When such a condition is found to exist a small quantity of well-prepared farinaceous food is valuable as an element in the diet, incorporated with mixed cow's milk.

An examination of the stools of children so fed would be a guide as to the quantity of starchy food to be used, and when farinaceous food is employed slow feeding is probably preferable to the bottle.—*The Boston Medical and Surgical Journal*.

PUERPERAL DIABETES.

Dr. J. Matthews Duncan contributes a most valuable paper* on this very rare disease. In it he gives histories comprising twenty-two pregnancies in fifteen women, varying in age from twenty-one to thirty-eight years of age. So far as is known all, with one exception, were multiparæ. Of the twenty-two pregnancies in fifteen mothers four ended fatally after delivery. Hydramnios was frequent, and the liquor amnii in one case contained 0.7 per cent. of sugar, and in a second case there was also unquestionably sugar in the liquor amnii, although no

* Transactions of the Obstetrical Society of London, vol. xxiv., p. 256.

quantitative examination was made. In seven of nineteen pregnancies, in fourteen mothers, the child died during the pregnancy, having in all of these reached a viable age. In two more the child was feeble, and died a few hours after birth. In one other case the child had diabetes. The dead foetus was very large in many of the cases.

Dr. Duncan admits that the number of cases which he has been able to find is too small to possess any very great statistical value, but the histories seem to show—

- (1.) Diabetes may come on during pregnancy.
- (2.) Diabetes may occur only during pregnancy, being absent at other times.
- (3.) Diabetes may cease with the termination of pregnancy, recurring some time afterwards.
- (4.) Diabetes may come on soon after parturition.
- (5.) Diabetes may not return in a pregnancy occurring after its cure.
- (6.) Pregnancy may occur during diabetes.
- (7.) Pregnancy and parturition may be apparently unaffected in its healthy progress by diabetes.
- (8.) Pregnancy is very liable to be interrupted in its course, and probably always by the death of the foetus.—*The Boston Medical and Surgical Journal*.

ESERINE IN DIARRHŒA.

Dr. Eschle, in the *Neurologisches Centralblatt*, May 15th, reports observations made in the Richter'schen Heilanstalt (Pankow-Berlin) on the curative effects of calabar bean preparations in catarrhal conditions of the digestive tract. Eserine (physostigmin), the alkaloid which with calabarin is found in the seed of the *physostigma venenosum*, was used some time ago in the same institution, where it gave great satisfaction in quieting maniacal patients, and for such paralytics as were not liable to apoplectic attacks. The action of the drug proved

similar to, though more lasting and reliable than that of hyoscyamin. The method of exhibition was by the subcutaneous injection of a one-half per cent. solution of sulphate of eserine in doses of .001 gramme to .0015 gramme. Its use was found to be always attended by alteration in the digestive organs. One maniacal patient who cried out continuously was quieted by the use of .0025 gramme; this rather large injection caused vomiting and free watery stools. The use of smaller doses quieted the physical and motor restlessness, and produced sleep without vomiting or defecation. In three other patients (paralytics) stoppage was noted for over thirty-six hours, vomiting occurring only once. Quiet in bed was always ordered. The special object of the communication was to report the results of the use of eserine in three cases of intestinal catarrh.

The first patient suffered from an attack of this nature, causing continual desire to defecate, with a passage every half hour during the second day. Hypodermic injection on this day of .001 gramme of the eserine solution produced sleep in an hour and a half, which lasted from two o'clock till evening. No passage occurred until forty-six hours after the injection.

In the second case intestinal catarrh was brought on by a cold. A large number of watery stools were passed during the night and on the following morning. The same dose was administered at 10.30 A. M. The patient complained of general weakness and of numbness in the arm in which the injection was made. The pulse was slowed, but remained moderately strong. At four P. M. a watery passage occurred, after which none until twenty-seven hours after the injection, followed by stoppage of thirty-six hours; there was no vomiting. The patient was quite comfortable on the evening of the day of the injection, having passed the afternoon half asleep.

The third patient, a man of thirty-nine years, suffered from chronic dysentery, acquired in Africa. On the day before the medicine was used twenty-four bloody stools were counted by the attendants. On the day of the first injection (.001 eserine

sulph. twelve stools were passed of unchanged character. During the twenty-four hours following the second injection (.0015) there were five passages striped with blood, and during the next twenty-four hours, four bloody stools. In the two days following the third injection (.0015) seven stools were passed, of which three were accompanied by blood. During the four days following the fourth injection (.0015) the passages varied from one to six, some with and some without blood. Vomiting followed the first two injections only. The writer remarks that although the last case was not watched to its termination, and although he could not promise himself a perfect cure, the result was sufficiently marked to illustrate the beneficial action of the drug in this dose in limiting the weakening hemorrhages and albuminous stools. He also announces his intention of instituting shortly experiments on animals with regard to the contradictory action of the drug in large and small doses, a peculiarity already noticed in other medicaments.—*The Boston Medical and Surgical Journal*.

RECURRENT ATTACKS OF ZYMOTIC DISEASE IN THE SAME PERSON.

Amongst the poor arguments to which fanatical people are driven to make a case against vaccination, the occurrence of small-pox in those who have been vaccinated is one. They generally omit to state that when this does happen the mortality and severity of the disease are immensely reduced. They also omit to state that people who have been well vaccinated twice have almost an absolute immunity from the dreaded disease. But though, for practical purposes, the rule is absolute, there must almost necessarily be an occasional exception, when we remember the well-known fact that some people have a liability to one or other of the zymotic diseases altogether peculiar and amounting to a veritable idiosyncrasy. The *Medical Record* of New York, in a recent number, contains the report of a case by

Dr. C. L. Dana, in the Practitioners' Society of New York, of a medical friend who before the age of twenty-one had suffered from five attacks of scarlet fever. In each attack the symptoms were well-marked; desquamation and, in most of the attacks, albuminuria were present. We have recently seen a case of a second attack of scarlet fever with well-marked desquamation. Not long ago an instance was brought under our notice of a man who had had two attacks of small-pox in twelve months, and—tell it not to Mr. P. Taylor—a history of one or two unsuccessful attempts at revaccination. If small-pox itself will not secure such people immunity, it is small blame to vaccination that it does not, though thorough vaccination in infancy and at puberty would probably be more likely to do so. Such people are to be excluded from all general arguments. They are as exceptional in their physical constitution as some of our anti vaccination friends are in their intellectual organization.—*The London Lancet.*

STEWED FRUIT FOR THE GOUTY AND THE DYSPEPTIC.

Probably the impression first created by scanning the title of this paper will be as follows: "Why, what have either the gouty or the dyspeptic to do with stewed fruit at all?" That sugar is apt to disagree with sundry stomachs, causing great acidity, is a clinical fact not to be disputed. But because such is the case with a limited number of persons it does not seem, to me at least, that therefore a sweeping prohibitory law is to be laid down for a large section of the community. Gout poison, all admit, is a product derived from the albuminous constituents of our food, as nitrogen is a marked element in its composition. It is, then, the albuminous element in our food which has to be avoided in lithiasis. How sugar, fruits, and even vegetables came to be banned my researches have not enabled me to ascertain. From the time of Magendie's path-breaking essay writers on gout have advised the restriction of the nitrogenized, or

azotized, constituents of our food in cases of lithiasis. But that the objection to sugar in gouty cases exists may not be denied. In speaking of stewed fruit for the gouty and the dyspeptic my views will be heterodox in the eyes of many. But neither the light of chemistry nor the lessons of practice conflict with my views. I am quite prepared to undergo any criticism these views may elicit or provoke. Indeed, the subject would be all the better for being thoroughly ventilated.

At the outset, I admit that for many persons—gouty, dyspeptic, and glycosuric—ordinary stewed fruit is objectionable from the amount of added sugar it contains. Where the acidity of fruit is masked or hidden by an excess of sugar, then the resultant product is cloying to many palates, and offensive to many stomachs. Probably in this all readers will agree with me. But it is by no means necessary to render stewed fruit objectionable by adding much sugar to it. Deprived of this excess of added sugar, stewed fruit can not only be rendered unobjectionable, but be converted into an actual prophylactic measure, especially in cases of lithiasis. In order to attain this end all that need be done is to neutralize the excessive acidity by an alkali, and then little or no sugar is required. Thrifty housewives have long been familiar with the fact that the addition of a small quantity of the bicarbonate of soda to stewed fruit reduced the acidity, so as to save the necessity for much sugar. This was done simply for economy. The principle has a far wider application. Last June I was requested to visit a lunatic in the Midlands who was also gouty; and when the gout was acutely present she was more excitable and violent than usual. No medicine would she take, but she was very fond of stewed fruit. To add potash to her stewed fruit was very easy, yet very effectual. After this I gave my cook instructions to perform a series of experiments for me with all our ordinary native fruits. The result of this was that the amount of bicarbonate of potash required for each pound of fruit was found to be about as much as would lie upon a shilling. And this is a much better guide for a cook than to

put so many grains. With all fairly ripe fruit this was just sufficient to neutralize the acidity, and bring out the natural sweetness; indeed the resultant product was quite sweet enough for most adult palates. Such stewed fruit could be eaten alone, or with milk puddings, or with cream, or the Swiss milk in bottles. Gooseberries, currants of all kinds, apples and plums, all alike were excellent when so prepared. There are some points, however, to be attended to in practice, which are of more or less importance. The first matter is this: with dark fruits, as the black plum, for instance, the color is impaired by the alkali, and the fruit is less attractive to the eye than is that of the ordinary stewed fruit, which is of a deep clear crimson. This matter is easily got over; a little cochineal will give the desired color. Another is this: where there is no natural sweetness, to neutralize the acid completely by an alkali leaves nothing, simply a cold mass, to which the palate is absolutely indifferent. Such is the case with rhubarb. Here it is well to use half or all the amount of alkali with some sugar. The same is the case with early gooseberries before they have any natural sweetness, no sugar formed in them. Here the full quantity of alkali should be used, and the remaining acidity met by sugar. Where three-quarters of a pound of sugar is required to sweeten one pound of fruit, only one-quarter of a pound of sugar is necessary after the alkali has been added. The sour-sweet taste is thus secured, which is toothsome. Now, in these two instances the stewed fruit is only rendered less objectionable to the stomach plagued with acidity, not made quite inoffensive. But for ordinary gouty individuals not troubled with acidity of the stomach, such stewed fruit is quite admissible, and forms a pleasant method of taking potash. The whole subject is one which deserves attention from invalids as well as their medical attendants, as it opens up to many a new field of diet altogether. Fruits *au naturel*—as the strawberry, for instance—are good in gout from the salts they contain, and are unobjectionable stewed if it were not for the acetous fermentation of the added sugar.

Here soda may be used. But where there is lithiasis the alkali ought to be potash. The gouty and the bilious alike are troubled with the products of the metamorphosis of albuminoids. Neither the lithates of the gouty nor the bile acids of the bilious are derived from the saccharine or farinaceous elements of the food. It was possible to make bricks without straw, but it is impossible to make bricks without clay! No liver can make these nitrogenized substances from simple hydrocarbons; it is physically impossible! The dietary for each is the same—a non-nitrogenized dietary, in which vegetables and farinaceous matters are indicated, and saccharine matters, too, unless acidity in the stomach is produced by them. Milk puddings and stewed fruit are excellent for the dyspeptic, the bilious and the gouty, as my experience tells me; and for one of those who suffers from taking sugar, nineteen would be all the better for stewed fruit. But for those who dislike sweets, and for those who suffer from acidity, it is well to prepare the stewed fruit with alkalis, completely and solely or partially, as the case may be. This may sound very heterodox to some readers; but just let the incredulous test the matter for themselves.

Now, there are two other matters remaining to be alluded to, on which it is impossible to speak dogmatically, or *ex cathedra*; they are, rather, matters of personal belief, and they are these:

1. It does not seem a matter of indifference in lithiasis what forms of albuminoids are taken. The flesh of animals is rather converted into peptones by pepsin in an acid medium—that is, by gastric digestion—than by trypsin in an alkaline medium. And such peptones seem specially liable to form lithates. Caseine is more specially digested by trypsin in the intestine, and such caseine peptones seem less readily converted into lithates; the clinical fact being that a milk dietary or a pulse dietary is good for the subjects of lithiasis. Caseine is the form of albuminoid, it seems to me, best suited to the gouty. Milk or milk puddings (made without eggs) are capital food for the cholæmic or the lithæmie. These fibrin-albuminoids, digested by pepsin, are laxative, while casein is binding or constipating.

Milk puddings, then, go well with stewed fruit, which is a laxative. Many thoughtful physicians agree with me in the above matter. Now I am approaching what some may hold very disputable ground, yet nevertheless I venture to say here what I am beginning to think. Both for the classical diabetic and the glycosuric, cane sugar—the sugar of commerce—is bad, producing the unpleasant symptoms of sugar in the blood very readily. Yet many glycosuric individuals can take farinaceous matter with comparative immunity from discomfort. Starch in its way to grape sugar is much less troublesome than in cane sugar passing into grape sugar; why I do not know, but the fact remains. Now, with many glycosuric individuals fruit stewed in the manner advocated here is quite permissible, while ordinary stewed fruit is very objectionable. For the dyspeptic, the gouty, the bilious and the glycosuric individual (as well as the rheumatic, a small class), fruit stewed with an alkali in the proportion of as much bicarbonate of soda as will lie upon a shilling to the pound of fruit, when put in the oven, will be found both palatable and permissible. It saves the gastric acidity from the acetous fermentation of the sugar in the dyspeptic, or with the glycosuric relieves him from the excess of cane sugar which disagrees with him. Where there is distinct gout not only is fruit stewed with an alkali good and unobjectionable; but if it be prepared with the bicarbonate of potash, it is converted into a therapeutic agent of no mean value; while the resultant product is quite sweet enough for a palate which has outlived the “sweet-tooth” period. The whole matter is a simple one, yet it seems to contain much promise for many persons.—*J. Milner Fothergill in The Lancet.*

INFLUENCE OF BENZOATES OF ALKALIES ON THE EXCRETION OF URIC ACID.

Dr. Garrod, in his third Lumleian lecture, as reported in the *British Medical Journal*, April 21st, 1883, gives a summary of some interesting experiments on the influence of hippuric and

benzoic acids on the elimination of uric acid, the conclusion he arrives at being that these two former, when in dilute solution, and alkaline, are capable of destroying the latter as a chemical experiment, and, when administered medically, of materially lessening the excretion. He gives some sets of experiments, which show that benzoates, when administered in set doses, have the effect of diminishing the uric acid. I have repeated his experiments so far as regards the administration of benzoates, and do not get results similar to his. On May 13th, the urine was collected, the diet having been regulated exactly for seven or eight days previously. The collections of 14th and succeeding days are as given in the following table :

Date.	Urine.	Specific Gravity.	Uric Acid.
May 14th.....	38 ozs.....	1020.....	13 grains.
" 15th.....	36 ".....	1022.....	12.3 "
" 16th.....	26 ".....	1030.....	13.0 "
" 17th.....	29 ".....	Not analyzed....	
" 18th.....	20 ".....	1030.....	13.2 "
" 19th.....	32 ".....	1023.....	13.0 "
" 20th.....	38 ".....	Not analyzed....	
" 21st.....	40 ".....	1023.....	12.4 "
" 22d.....	48 ".....	1020.....	13.7 "
" 23d.....	40 ".....	1026.....	14.0 "
" 24th.....	32 ".....	1025.....	13.2 "
" 25th.....	28 ".....	1025.....	Not analyzed.

On the 20th, 30 grains benzoate of soda in solution were taken at night in one dose. On the 21st, three doses, of 20 grains each, of benzoate of soda, 6 ounces extra water. On the 22d, two doses of 20 grains. On the 23d, three doses of 20 grains. On the 24th, none.

The benzoate acted somewhat as a diuretic, although very little extra water was taken. The estimations of uric acid given were made by the zinc sulphate precipitation process; and to corroborate, quantities of the urine were precipitated by the zinc sulphate solution after removal of the phosphates, and the precipitate, washed and decomposed by dilute sulphuric acid, gave abundant crystals of uric acid, as proved by microscope and murexide test.

Results so divergent as these are from those of Dr. Garrod, certainly surprised me; for although I have not seen his paper to the Royal Society, I have followed his directions closely, as given in his lecture-report. His process for estimation, as given in his first lecture, is the acidulation process, and I sought in this some explanation of our difference.

A portion of the urine collection of the 21st, and also of the 22d, 23d, and 24th, were set aside after acidulation. These urines gave very little crystallization of uric acid—a scarcely perceptible trace appearing even after seventy-two hours' standing, with occasional stirring. Of the urine collection of the 21st, 20 ounces were acidulated; and, on the 24th, the crystallization from the whole 20 ounces was scarcely ponderable, but some feathery crystals were evident, probably benzoic acid.

From this it is evident that the presence of a benzoate, or even of benzoic acid, can prevent the crystallization of uric acid from urine; but it is also evident that it does not destroy it; and this result is in agreement with those of Kerner, and of Wöhler and Keller, as quoted by Parkes.

But Dr. Garrod states in his lecture that the uric acid is destroyed, and states that the murexide test failed to answer, after a mixture of a benzoate and a urate in alkaline solution had stood some time at a temperature of the body. He states that a dilute solution is necessary, and from twenty-five to fifty times as much benzoate as urate. In his lecture, he gives nothing more definite than a dilute solution, but I took uric acid, 2 grains, benzoic acid, 60 grains, water, 4 ounces, and dissolved till clear with caustic soda, the solution being alkaline to test-paper; the whole was put into a four-ounce bottle, and kept for nine hours at a temperature of 98° Fahr. One-half of this mixture, diluted and precipitated by zinc sulphate solution, gave nearly one grain of uric acid. The other half, diluted again to 4 ounces, was kept for twelve hours at a temperature of 110° Fahr., and then gave very markedly the murexide test in a single evaporated drop. It was left twelve hours more at 100° Fahr., and again tested,

no change being apparent. It was then rendered more alkaline with a mixture of potassic and sodic carbonate, and left twelve hours at 100° , at the end of which time, one drop, evaporated as before, gave faint evidence of uric acid by the murexide test.

Again, a weighed quantity of 1 grain of uric acid and 60 grains of benzoic acid were dissolved in 6 ounces of water with soda to a clear solution, and left 12 hours at a temperature of 100° . One drop gave clearly the murexide test. A little mixed sodic and potassic carbonates were added, and the mixture again left 12 hours at 100° . There was now no evidence of uric acid, by the murexide test; but on precipitation with zinc sulphate solution, and solution of the precipitate in dilute sulphuric acid, abundant crystals deposited, of which a minute quantity gave very markedly the murexide test.

Again, a weighed quantity of one grain of uric acid was dissolved in 6 ounces of water by means of sodic and potassic carbonates in slight excess; and one drop of the solution evaporated rapidly (as in the other testings), gave a far fainter test spot of murexide than the drop from the same strength solution of the preceding experiment prior to digestion. This solution was then set aside, at 100° Fahr., for ten hours. One drop then evaporated gave very slight evidence of uric acid by murexide test. After twelve hours, no evidence of uric acid could be obtained by this test.

The results of the above experiments seem to point to the fact that the uric acid is not destroyed by benzoic acid, but exists in a state of combination (it may be as a compound acid), and when this combination is evaporated with nitric acid it gives no murexide with alkalis, and when it is precipitated by zinc sulphate solution, the uric acid combines with the zinc oxide. And the last experiment seems to demonstrate that an alkaline solution containing soda and potassa is capable of really destroying uric acid if kept at a temperature 98° Fahr., even without the presence of benzoic or hippuric acids, probably by oxydation. This was a discovery of Schunk, who found the products of

decomposition to be oxaluric acid, and finally urea and oxalic acid; and Dr. Basham has noticed that this takes place in the animal economy when potash salts are administered, coincidentally with the diminution of the uric acid (*Practitioner*, vol. v, 1870).

It is well known that there are many substances which, when present in a solution of uric acid, are capable of increasing its power of remaining dissolved, and benzoic acid certainly appears to be one of these.

I have not tried the effect of the administration of hippuric acid by mouth, because it is well known that if benzoic acid be administered, hippuric acid appears in the urine; and if this hippuric acid, formed in the animal, did not diminish the uric acid (though it did prevent its precipitation by acid), neither would hippuric acid administered by the mouth be likely to do so. Moreover, we have no guarantee whatever that hippuric acid, administered by the mouth, will appear unchanged by the urine; and, reasoning from the behavior of uric acid when so administered or injected, it would certainly not do so.

It is tolerably certain that variations in diet will cause variations in the excretion of uric acid; and, if a strong vegetable variation in the diet of mixed feeders will cause it to be replaced by hippuric acid, it is reasonable to suppose that the same cause, acting in a less degree, will produce the same effect in a less degree; therefore, we may conclude that, in the urine of mixed feeders, we have more or less of a substance which will prevent the precipitation of free uric acid; that the quantity, and therefore the effect, varies with the diet. It must be evident, therefore, that a process of estimation, capable of being affected in this manner, cannot be reliable.—*Edmund Alleyne Cook, in the British Medical Journal.*

THE ACTION OF QUININE UPON THE EAR.

Green (*Boston Med. and Surg. Jour.*, March 8, 1883) has an interesting and timely paper upon the above subject, and formulates his conclusions as follows: 1. Clinical experience the world

over is that quinine occasionally produces serious injury to the ears. 2. From our present knowledge, both clinical and experimental, we are justified in asserting that the action of quinine upon the ears is to produce congestion of the labyrinth and tympanum, and sometimes distinct inflammation, with permanent tissue changes. 3. The action of the drug upon the ears should always be considered in prescribing it, and changes in the ears, due to existing or previous inflammation of those organs, constitute a contraindication to the medicine in large doses or for a long time, except under urgent circumstances. 4. Where large and continuous doses are absolutely necessary, an occasional intermission of the administration is desirable, if possible, to diminish the risk to the ears.—*The New York Medical Journal*.

ALBUMINURIA.

The dependence of the symptom albuminuria on the existence of a dyscrasia of the whole system is a view which cannot be said to be of interest for its novelty. M. Semmola recently advocated, at a meeting of the Academy of Medicine, the ancient doctrine that Bright's disease was a malady of the whole body, that the albuminuria was the result of a cachexia, and preceded the renal changes. Various forms of albumen were injected into the vessels of animals with the production of albuminuria, and it was found that the kidneys exhibited anatomical alterations similar to those met with in the various phases of Bright's disease. As the writer in the *Gazette Medicale* suggests, it is probable that the appearance in the renal circulation of albumens alien to those of the animal in question may, like any other irritant, induce morbid changes of an inflammatory nature. Even were the morbid appearances of the kidneys precisely the same in the experimental and clinical disease, still no argument of any weight would be afforded, seeing that many different causes may produce like effects—*The London Lancet*.

SPRENGEL: COMMUNICATION IN REGARD TO ONE HUNDRED AND
THIRTY-ONE CASES OF CARCINOMA OF THE BREAST,
OPERATED UPON IN VOLKMANN'S CLINIC
DURING THE YEARS 1874-78.

This is a condensation of a contribution to Langenbeck's *Archiv*, consisting mainly of statistics. Puerperal diseases have occurred in many of the cases. About thirty per cent. of those who had borne children, and afterward were afflicted with cancer, had suffered from mastitis. One is very likely to draw certain inferences from this fact. The site of the disease was most frequently upon the upper and outer side of the breast. Infiltration of the glands in the axilla usually followed the first appearance of the growth, after fourteen months, union with the skin after sixteen months, with the muscles after eighteen months. Ulceration occurred, upon an average, after twenty months. Metastases were observed, upon an average, two years after the local affection first made its appearance, and they were almost invariably accompanied by glandular infiltrations. He does not think that clinical facts support Török and Wittelshöfer in their statement that an extension of carcinoma along the direct course of the blood circulation is relatively common. The question of recurrence is all important. After the first operation, the average duration of time before the re-appearance of growth is eight months, after the second it is seven, after the third it is two months. When the breast alone is amputated, the disease often returns in the axillary glands, but if these glands have been removed, the recurrence is not usually in the axilla. Of the cases tabulated, twelve were radically cured, more than three years having elapsed since the operation was performed. It is all important that the operation be performed early in the history of the tumor. Out of twenty-nine of the tabulated cases in which there was no glandular infiltration, six were cured, while of one hundred and two cases in which the axillary glands were involved, only nine were cured.

Three of the fifteen cases recorded as cured, died of cancer, not of the breast, after more than three years of immunity from the disease, leaving only twelve, as already stated, which could be looked upon as radically cured.—*The American Journal of Obstetrics.*

VOHSEN: ACUTE RHEUMATISM.

Karl Vohsen, in an interesting article, discusses first the many theories as to the etiology of rheumatism, finds most of them untenable or unsupported by any definite facts, but leans rather to the belief that it is an *acute infectious disease*, due probably to micrococci in the blood. The many complications are discussed in relation to this point.

Childhood suffers from all the complications of acute rheumatism which befall adults. Paralysis of the muscles of the eye is the only one the author has not seen in children. But still rheumatism in children has its own characteristics. The severity and duration of the pain is less on the average than in adults, the duration in adults being two or three weeks, and in children five to eighteen days. The complications in children show still greater differences. Chorea, a frequent complication in early years, is exceedingly rare in adults. Heart affections are very much more frequent in children. From his own cases and from the records of many others, the author finds that the heart is affected in nearly fifty per cent. of cases in children. This complication is as apt to occur in mild cases as in severe ones, in fact, some authors think it more frequent in the subacute cases.

The author then analyzes twenty cases which had recently come under his notice. The ages were between nine and fourteen years. No deductions as to hereditary influence or sex could be fairly drawn. In nine cases there was endo- or pericarditis. In none of these was the fever at any time above 103.2° F., and in one case there was no fever.

Swelling of the joints was observed in three cases. The pain was severe, but of short duration. In all cases the salicylate of soda proved promptly effective against the affection of the joints, but had no effect on the development of the cardiac complications. These occurred in about half of all the cases. The mitral valves and the pericardium were most frequently attacked. The lighter forms of rheumatism seemed especially to predispose to the heart troubles, making examination of the heart necessary in all cases.

As to why the heart is affected in children more often than in adults, the author can offer no explanation. Anatomy and physiology give us no theories. The noduli, Jacobi's narrowness of the aorta, and other anatomical points of difference between the child's and the adult's heart, have disappeared before the age at which rheumatism is frequent. The author then argues that the best theory to explain it is that rheumatism is an acute infectious disease, and attacks the heart of the child more often on account of the less power of resistance it has. Further, exactly this relation of the heart to acute rheumatism is an argument in favor of its infectious origin. Of forty-five cases of endocarditis in childhood, reported by v. Dusch, fifteen were idiopathic, twenty were connected with acute, two with subacute rheumatism, and the remainder were complications of outspoken infectious diseases—scarlatina, variola, syphilis congenita. The acute rheumatism, therefore, so far as the heart complication is concerned, would seem to class itself with these acute diseases. Further, the rheumatism especially causes heart complications, because its affection especially attacks synovial membranes, and because there is so marked a parallelism between synovial membranes and the endocardium. All the darkness which surrounds the development and course of acute rheumatism is not removed by the supposition of a specific virus, but the author claims that not only has the theory good facts for its support, but also it explains more of the symptoms and complications than any other theory which has been offered.—*The American Journal of Obstetrics.*

TREATMENT OF NOCTURNAL EARACHE IN CHILDREN.

What physician has not been puzzled to know what to do for the constantly recurring earaches of children at night? Some children cry night after night from pain in one or both ears. They cannot sleep themselves, and will not let others sleep. During the day they are not bothered at all, but as soon as they retire at night the earache begins, and with it the poor mother's trouble begins. All pains are worse at night than in day time. It is quite probable that the ears of such children are more or less painful during the day, but their attention being entirely occupied with their plays, they do not notice the pain. At night, their minds not being otherwise occupied, the slight exacerbation that naturally takes place then is sufficient to keep such children from sleeping.

Now, what is the best treatment for these night earaches in children? The most effectual treatment that I have ever used, or seen recommended for this trouble, is the local use of a solution of sulphate of atropine. I brought this method of treatment to the notice of the profession some years ago, and have had no occasion since to change or even modify it, its effect being so very satisfactory. In fact, I have not yet met with a case of this kind which was not at once relieved by the local use of atropine. The solution is to be simply dropped into the painful ear, and allowed to remain there for ten or fifteen minutes. Then it is made to run out by turning the head over, the ear being wiped off with a dry rag. The solution may be put in cold, though it is better to have it slightly warm, as it does not shock the child so much. From three to five drops should be used at a time.

The strength of the solution must vary according to the age of the child. Under three years, one grain to ounce of water; over three years, two grains to ounce of water; and over ten years, four grains to ounce of water. In a grown person, almost any strength can be used. In a small infant, not more than half a grain to ounce of water should be used. All ages will bear a stronger solution in the ear than in the eye.

The application should be repeated as often as may be necessary. It is not often necessary to use it more than once the same night. Usually, a few applications permanently stop the pain.

The good effect of atropine in painful ears is because of its anodyne power. If physicians will try this plan of treatment in this class of cases, I am sure they will not be disappointed. In acute abscesses of the drum, and acute inflammation of the external meatus, the atropine will only slightly palliate the suffering, but in the recurrent nocturnal earaches of children it is practically a specific.—*Medical Brief.*

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, July 3d, 1883.

Vice-President, Dr. F. W. Bartlett, in the Chair. Dr. C. M. Daniels, Secretary.

Present—Drs. Frank, Weil, Gay, Hartwig, Coakley, Hopkins, Grove and Fell.

Voluntary Communications—Being in order, Dr. Frank reported a case of epilepsy of several years' standing, the paroxysms occurring from one to three times weekly; patient had also spermatorrhœa with phymosis. Operation for phymosis resulted in the immediate cessation of epilepsy, and four months had now passed with no recurrence of the symptoms.

Dr. Gay, in commenting upon the case, said it was very interesting and important, and that some further experiments in this direction were desirable. Also mentioned a case of a child of eight years having epilepsy to a degree approaching idiocy, who was constantly irritating penis. The hands were secured so as to prevent it, and several months after there was marked improvement in the condition.

Dr. Hartwig stated that although it might be circumstantial only, that there was no epilepsy among the Jews, so far as he

was able to ascertain. The fact seemed to give more importance to the case reported by Dr. Frank.

Dr. Daniels spoke of a case where a boy was injured by being thrown from a train, the right temporal bone being perforated, with oozing of brain substance, producing complete insensibility, the only movement being the involuntary act of frequently grasping the penis. Death occurred twenty-four hours after injury.

Dr. Grove reported a case, and showed a shawl pin of brass, two inches in length, bearing a head one-quarter inch in diameter, which was accidentally swallowed by Miss L. After the course of four and one-half days, during which time considerable pain in stomach and œsophagus was experienced, in a siege of coughing, the foreign body was brought to light. The point of this pin was exceedingly sharp, and was supposed, from symptoms of the patient, to have penetrated, partially, at least, the walls of the œsophagus. The question of interest was, should emetics in such a case be administered?

Dr. Gay reported a case of apoplexy; convulsions severe; patient pulseless; insensible and had paralysis to a great degree. He bled freely from arm, which immediately stopped the convulsions and restored sensibility. Although only four days had elapsed, the patient was gradually improving, with good prospects for recovery. He wished to call the attention of the profession to the necessity for the use of the lancet, believing it should be used more frequently.

Dr. Bartlett thought we all said that blood letting was coming in vogue. He had bled quite a number, and with benefit. Related a case of delirium tremens, where a man came to his office and insisted on being bled, which being done resulted in an immediate improvement.

Dr. Hartwig gave an interesting account of an ovarian tumor which he recently removed, being a multiple cystoid weighing something over sixty pounds; patient recovered. The history

of the case and complications given in detail would be too long for this report, and would form an interesting subject for a separate article.

Dr. Gay referred to carbolic acid, as spoken of by Dr. Hartwig, and believed it dangerous when used in strong solution, and that such was now the general opinion of the profession.

Dr. Gay reported a case of injury to the tarsus, being crushed by car wheel; attempt to save foot was unsuccessful; amputation of leg, and patient placed in tent outside of hospital; Esmarch's bandages used, and boroglyceride dressing; obtained union by first intention; recommended the outdoor treatment as being very beneficial; several other cases having similar conditions that were being treated in the tents at the hospital were all doing equally well.

Dr. Bartlett reported a case of "fœtal malformation." It will appear in detail in the September number of the JOURNAL.

Dr. Fell, as representative of the "American Society of Microscopists," cordially invited the members of this association to attend their annual meeting at Chicago, beginning August 7th.

Prevailing Diseases.—None reported, the city being in an unusually healthful condition.

Adjourned.

CLAYTON M. DANIELS, *Secretary.*

Editorial.

VOLUME XXIII.

The present number introduces to our numerous subscribers and readers the twenty-third volume of the JOURNAL, the fifth under the present editorial management. What we have had occasion to say heretofore of the success of this enterprise in medical journalism may well be repeated here, that this JOURNAL is a reflex of the activity and zeal of the profession of this city rather than the product of our personal efforts, or a measure of our

editorial ability. Judged by this standard, the increased value of the last volume affords an encouraging indication that Buffalo in its professional interests and activity is keeping pace with its great commercial progress which has received an impetus within the past few years unparalleled in its history.

Taking advantage of this increased activity in commercial as well as professional circles, we enter upon the work of another volume, with an enthusiasm born of past success and inspired by surrounding circumstances, while we have reason to be confident that under such improved auspices the JOURNAL will be able to meet with greater favor among its patrons, and continue to merit the favorable opinion and judgment of the profession. The constant increase in our subscription list, now larger than at any time since the present editors assumed charge of it, is a flattering indication of the kindly reception given to the JOURNAL wherever it is known and read.

For the future it is our purpose to give new value to its pages by publishing the best clinical lectures we are able to secure, with original communications from the ablest writers in the profession, and we invite our readers to furnish reports of rare and interesting cases occurring in daily practice. These features give a strictly scientific value to our pages, with a practical importance which will suit the more laborious scientific student and also the general practitioner.

The reputation always maintained by the JOURNAL places a responsibility upon the editors which it will be their effort to meet, and we rely upon the co-operation of the profession for such assistance as both opportunity and inclination may afford.

TO OUR SUBSCRIBERS.

We direct attention to the bills which will be found inclosed in this number of the JOURNAL, for unpaid subscriptions. The bills also include the advance subscription for the coming

volume which is in accordance with our terms. The annual subscription to the JOURNAL has been placed so low that it barely repays the cost of publication, yielding no return for the time and labor involved in editorial management. We ask our subscribers to remit the amount of their indebtedness promptly, that we may be encouraged to make needed improvements in the JOURNAL, that it may not only maintain its hitherto high reputation and be made equal if not superior to any of its metropolitan cotemporaries in the value and interest of its contents.

THE BUFFALO MEDICAL COLLEGE.

We have received the thirty-eighth annual announcement of this institution, which now ranks among the oldest of our medical colleges, and also one of the best in the ability and high professional character of the men who, in the past, have honored it with their labor and influence. It will be seen, by referring to the advertisement on the fourth page of our cover, that several important changes have taken place in its faculty. Within a few years the institution has suffered the loss by death of Prof. White, the ablest didactic instructor in obstetrics in this country. On account of physical disability, Prof. Miner has been compelled to relinquish the chair of special and clinical surgery. His name now honors the institution by standing at the head of its faculty as emeritus professor. Another severe blow, quite unexpected and involving a loss which it will be impossible to supply, is the resignation of Prof. E. M. Moore, who for many years has been a tower of strength to the collegè, attracting from far and near, by his eminent ability and wide reputation as a surgeon and teacher, students who have loved him for his sterling worth and unsullied private and professional character. The retirement of three such men within a brief period, makes a void which it will be difficult, if not impossible,

to fill, and the college must feel the effect which such losses inflict.

Prof. Moore's resignation is a loss to the profession of this city as well as to the college. It is but fair to say of him that he is recognized as the ablest lecturer on surgery in this country. In the clearness of his lectures and the logical and practical arrangement of the subject-matter he presents, and his large and varied experience, Prof. Moore has but few equals and no superior. We join, therefore, in the universal regret felt among the friends of the college and in the profession, that circumstances have arisen which have led him to sever his relations with the college, and to discontinue a life-habit of teaching in which he has achieved such eminent success and popularity.

We learn that Dr. Roswell Park, of Chicago, has been appointed lecturer on surgery and clinical surgery in the place thus vacated. We fail to ascertain, after repeated inquiries in surgical circles, that the new appointee brings to this responsible position any very extensive experience or reputation. Dr. Park enters upon his new duties a comparative stranger, whom we do not know, and who, if he possesses the ability to fill the chair once occupied by men of such surgical eminence as Hamilton and Moore, should possess a high order of professional attainments, an extensive experience in his profession and such skill as an operator as to make himself known and become a valuable acquisition to the profession of this city. The position is a difficult one to occupy and will test the metal of the new incumbent.

Among the new lecturers, we notice with pleasure the names of Dr. D. W. Harrington, as clinical lecturer on surgery at the Sisters of Charity Hospital, and Dr. W. H. Heath of the Marine Hospital Corps, as lecturer on genito-urinary diseases. These gentlemen are active and earnest workers in their special departments and will prove valuable instructors.

The faculty now presents many new names, mostly strange to our readers and but little known to the profession at large.

We regret that the college fails to place itself *en rapport* with the current of the best medical thought of the country and at once inaugurate a graded course of study, an examination for admission and other important features so generally called for by the profession in the interests of higher education. It possesses the opportunity now to take an advanced position. Quality rather than quantity, in its matriculants and graduates, would enhance its reputation, and make it subserve a noble purpose for the advancement of the great interests of the medical profession, rather than for the furtherance of private professional and pecuniary interests.

THE BUFFALO GENERAL HOSPITAL.

We learn that at a recent meeting of the medical and surgical staff of the hospital, the subject was discussed of filling the position on the active surgical staff, vacated by Dr. Miner on account of continued ill health. The name of Dr. Park, the newly elected lecturer at the medical college, was mentioned for that position, and objections being raised, the question was deferred to another meeting. It occurs to us to inquire, why should the Buffalo General Hospital follow the example of the college and import a surgeon from a neighboring city for a position on its staff? We do not question the right of the college to ignore the professional talent of this city, and seek its instructors from abroad. Such action concerns only the small coterie of medical men who comprise its faculty. The General Hospital, however, is placed upon a very different basis. It needs for its maintenance the sympathy and co-operation of the medical profession of this city, and it can not afford to ignore the very respectable surgical talent which the profession contains and seek a stranger upon whom to confer its honors, simply because the college desires it with a view to utilize its patients for clinical instruction for its classes. The

hospital should be something more than an appendage to the college. Its name warrants the opinion that it should hold an independent position open to the wants of all the profession, even as it aims to recognize the rights of all, especially of our city surgeons.

An important question for the hospital is that of support, and without an adequate endowment, such support depends largely upon the medical profession. How can it be expected that the profession will favor the hospital if the trustees continue to disregard the laudable ambition of its members by conferring appointments upon men whose only recommendation for its honors consists in their relations with the college?

This subject has been freely discussed in professional circles, and much ill feeling engendered towards the hospital for appointments which have been made on its staff, not for professional merit and attainments, but from social and college influences; until it has come to be a saying, that the college runs the hospital, and makes use of it to further its own selfish purposes.

We cannot say that all the present medical and surgical staff are representative men. Men of wider attainments and a higher order of ability have failed to seek recognition because of the uselessness of such an effort on account of the predominance of college influence in the board of trustees of the hospital.

The time is opportune for the hospital to recognize the true status of feeling prevailing in the profession of the city. A complete revolution in its medical and surgical staff would bring the institution more in sympathy with our best medical men, and through them with a wider popular constituency, while such a change would improve the mortuary statistics, which for many years have not been creditable to that institution. Such a revolution would satisfy the medical profession of the city and bring it in more cordial relations than now exist.

THE APPROACH AND PREVENTION OF CHOLERA.

It is now nearly three months since a few cases of Asiatic cholera were reported at Bombay, and of these no notice was taken by European governments. The disease has been raging, however, in a moderate degree among the coolies in the Brahmaputra valley since 1880. It was not until the last week of June that the cholera appeared at Damietta in Egypt, a place, by the way, entirely off the great Oriental route of travel, and it has now assumed alarming proportions in the whole Nile valley. In these last days of July the mortality for the whole country has been nearly 1,000 deaths daily, 500 being in Cairo alone. Besides this the disease has reached Shanghai and other Chinese cities, and within a day or two thirty-seven sporadic cases have been reported in Bombay. With such virulence as this it cannot be expected that other countries can resist the plague unless most stringent precautions are taken. The commerce with the East remains uninterrupted, and we are not surprised to hear that six cholera cases have reached Russian ports, several cases the London dockyards, and one the port of Havre. Naturally every effort is being made to ward off the pestilence, Russia and Germany quarantining six days, Italy twenty days, and France and Spain twenty-one days. England does not quarantine at all, but has adopted a code of regulations laid down by the local government board, requiring custom officers to take careful note of all vessels from abroad, and if suspicious cases are discovered, they are removed to pest houses on shore; the healthy passengers are allowed to land, and the ship after disinfection may proceed to its destination. The officer has power to detain the vessel twelve hours. The *Lancet*, in commenting upon this, says that if the disease finds its way into England in spite of these precautions, we may be certain that it would, as often before, equally evade any system of quarantine. In the United States the quarantine lasts five days, the sick being removed to floating or isolated hospitals.

Cholera has usually entered Europe by way of Russia. We find it frequently stated in the secular press, that the disease having appeared so late in Egypt, it is probable that it cannot progress much farther before cold weather comes in to put an end to it. Although cold weather does tend to moderate its progress it does not always check it. For instance in 1830 it spread over the whole of Russia, and the first cases reached England in July, 1831, from Riga; but it did not break out generally until October, when the monthly death rate was, for November, 97, gradually increasing to 1519 in March. Generally it is not until the year following its appearance in Oriental lands that it reaches Europe and invades America.

As to the method of communication of the disease, most authorities agree that the germs are conveyed to persons through drinking water rendered impure by drainage from localities where the evacuations of the infected have been deposited. As to direct contagion there seems to be no more than by ordinary typhoid fever, nurses, physicians or post mortem examiners seldom becoming its victims; the infective principle seems to lie in all the excretions, and these, through the ground, or by soiling clothes, rags and other articles, propagate the disease. In cholera an ounce of prevention is worth a world of cure. By isolation, by prompt destruction of excreta and all articles which have come into contact with a patient, by careful attention to the purity of drinking water and the drainage of the soil in city districts, there seems little reason why cholera should not be limited to its first victim.

America lies, as it were, between two fires. We are open to invasion on both the Atlantic and Pacific seaboard, from Europe and Asia. The vast amount of emigration, however, from the former continent renders the Atlantic our most vulnerable side, and it is to effective quarantining and thorough sanitary inspection here that we must look for safety. Vessels leaving England for America are inspected by American medical officers before starting, and the search is supposed to be care-

fully made by officers here upon their arrival. It remains to be seen how well our public health physicians at the ports, appointed by our usual corrupt political method, will perform their duties. It is possible that danger to themselves may waken in them an energy sufficient to do more than draw their salaries.

EDITORIAL NOTES.

DR. L. S. McMURTREY has retired from editorial connection with the *Louisville Medical News*, and is succeeded by Dr. H. A. Cottell, formerly editorial associate of Profs. Cowling and Holland. We must express our regret at the retirement of Dr. McMurtrey; a forcible and attractive writer, his talents have always been directed to the promotion of the best interests of the profession.

WE call the attention of our readers to the advertisement on another page, headed "Food Preservatives." That it is of the first importance to prevent septic or putrefactive changes in animal and vegetable matter intended for food, will at once be admitted. Some incredulity is to be expected as to the ability to accomplish this desirable end, without either injuring the taste or healthfulness of food so treated. The Humiston Food Preserving Company, however, claim to have completely succeeded, and their claim is supported by the testimony of Prof. Samuel Johnson of Yale College, one of the most accomplished chemists in the country, as well as by many medical men.

THE first number of the *Journal of the American Medical Association*, issued under date of July 14th, was duly received, and the second number has just come to hand. It is a double column, quarto page journal, very similar in appearance to the *British Medical Journal*. As yet, however, the similarity extends only to the printer's work. The editorials, original articles and selections are as good as the average medical journal presents to its readers. It is unfair, however, to expect too much, or to form an opinion of what the journal will be from the first few numbers. We hope and expect that it will in time take a leading position among the medical journals of the world.

NOTHING is too absurd for some one to assert, and nothing is too silly for many to believe, but it is painful to see medical men allowing their imaginations to carry them into the realms of the "Lunatic, the lover and the poet," as instanced in the following *official* report of the post-mortem examiners as to the cause of the death of Capt. Webb, who lost his life in the attempt to swim through the rapids below Niagara Falls:

"As the result of our examination, I am led to the conclusion, and in this I am seconded by my colleagues, 'that death was caused, not by asphyxia or drowning, or by any local injury by the body coming in contact with any hard substance, but by the shock from the reactionary force of the water in the whirlpool rapids coming in contact with the submerged body with such force as to instantly destroy the respiratory power, and, in fact, all vital action by direct pressure and force of contact—a shock of sufficient intensity to paralyze the nerve centers, partially desiccate the muscular tissues, and forestall any probable sequel of death by drowning.'"

Reviews.

The International Encyclopædia of Surgery, a systematic treatise on the theory and practice of surgery by authors of various nations. Edited by JOHN ASHURST, M. D., Professor of Chemical Surgery in the University of Pennsylvania. Illustrated with chromo-lithographs and wood-cuts. In six volumes. Vol. iii. New York: Wm. Wood & Co. 1883.

The third volume of this great work sustains the high reputation acquired by its predecessors. It is devoted to the consideration of the injuries and diseases of the various tissues of the human body, containing separate articles on injuries and diseases of muscles, tendons and fascia; on injuries and surgical diseases of lymphatics; on injuries of blood vessels; on surgical diseases of the vascular system; on aneurism; on injuries and diseases of the nerves (including tetanus), and on injuries of the joints. The authors are respectively: Andrews, Barwell, Bellamy, Conner, Lidell, Nicaise and Wyeth; and most

admirably has each accomplished the work attempted. The subjects are not only treated exhaustively, but also in an eminently practical manner. The work is in happy contrast with that of Ziemsen's *Encyclopædia of Medicine* in its more practical value, and if the succeeding volumes are equal to the three now issued, the work will be a necessity to every surgeon. The book is admirably presented by the publishers. The illustrations are excellent and numerous.

Therapeutic Handbook of the U. S. Pharmacopœia, being a condensed statement of the physiological and toxic action, medicinal value, methods of administration and doses of the drugs, and preparation in the latest edition of the United States Pharmacopœia (Apothecaries' and Metric systems), with some remarks on unofficial preparations. By ROBERT T. EDES, B. A., M. D. New York: Wm. Wood & Co. 1883.

As the title indicates, the book is an abbreviated Dispensatory. The author states that he has endeavored to supply, briefly and concisely, the information necessary to make it a convenient book for the practitioner, and in this he has succeeded. It cannot be expected that in a book of 400 pages he has been able to condense all the therapeutic knowledge contained in the immense tomes devoted to pharmacology, but he has made the condensation with good judgment, and presents to the profession a useful book. Indeed, any book is valuable which will aid in familiarizing the medical profession with the contents of the Pharmacopœia, so that they may recognize how well all possible therapeutic demands are therein provided for, and how unnecessary it is that they should undergo the humiliation of seeing their patients, whose wants they are supposed to know, prescribed for by distant druggists, who manufacture complicated preparations with high-sounding names. Most of these are very distinctly inferior to the simpler material of the Pharmacopœia, open to all without concealment, advertisement or charlatanry of any kind.

THE
BUFFALO
Medical and Surgical Journal.

VOL. XXIII.

SEPTEMBER, 1883.

No. 2.

Original Communications.

UTERINE POLYPI.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE
UNIVERSITY OF PENNSYLVANIA, JANUARY 17, 1883.

BY WILLIAM GOODELL, M. D.,

Professor of Gynecology in the University of Pennsylvania.

REPORTED BY WILLIAM H. MORRISON, M. D.

GENTLEMEN—I have often stated to you as a broad rule, that when a married woman, over the age of forty, who has borne children, comes to you giving a history of hemorrhage, the first thing that you should think of is carcinoma, and in nine out of ten cases that is what will be found. If, however, the woman is unmarried, or if married, has not borne children, a benign tumor of some kind will in all probability be found. There may be occasional exceptions to this rule. Sometimes the bleeding will be due to a sarcoma, but this is rare, and may virtually be left out of consideration.

Last Saturday an unmarried woman came to my office with a history of hemorrhage, violent ovarian and uterine colic and spasm of the bladder. I said to myself, "this must be a tumor of some kind and not carcinoma." I placed her on the ex-

amining table and was about to make an examination, when it suddenly flashed across my mind that in two hours I had to perform an oöphorectomy, and there might be here a polypus which had broken down producing a fetid discharge which would infect my fingers, so I decided not to examine, and, after explaining the reason to the patient, I asked her to return on Monday. She came at the time appointed; I found a polypus, and told her to come to this clinic.

It might be well to here explain the difference between ovariectomy and oöphorectomy. They both mean removal of the ovaries; in ovariectomy the ovaries are removed because they are diseased; in oöphorectomy they are removed, not for disease of the ovaries, but for some extrinsic purpose, usually in order to bring on the change of life.

Here she is, a woman of about forty years of age, with an history that the monthlies became menorrhagic. When I pass my finger into the vagina, I feel in the os uteri a tumor, around which I can not pass my finger.

Polypi, probably all arise as submucous fibroid tumors, which start in the fibroid layer directly beneath the mucous membrane and grow in towards the uterine cavity, that being the direction of least resistance. Having reached the cavity, the peristaltic action of the womb in its endeavors to extrude the foreign body causes the formation of a pedicle. Polypi are therefore nothing more than pedunculated fibroid tumors of the womb. They may be found in three different positions: They may be (1) wholly in the vagina; (2) they may protrude from the neck of the womb, being partly within the cavity and partly in the vagina like the clapper of a bell, or (3) they may be entirely within the cavity of the womb. From the first situation they are easily removed except when very large. They may at times be almost as large as a child's head. Two years ago, I removed one which was so large that I had to make lateral incisions in the perineum, and even then there was a tear. After the removal she had all the evidences of having given

birth to a child. When she left, I told her that if she had any trouble, she should write to me for a certificate of virginity, for previous to the operation I found a complete hymen. After she went home, there were such whisperings among the old women of the village, that I had to write out the certificate.

When the polypus is in the vagina, our plan is to twist it off, or if it is large, to remove it with the wire ecraseur, or even piece-meal, in the best way we can. If it is dangling from the mouth of the womb, we do the same thing. When, however, the polypus is in the cavity of the womb the direction given in the old English recipe for making hare soup is applicable, "first catch your hare." So here, one must first catch the polypus before one can remove it. The first thing is to determine whether or not there is a polypus inside of the womb; we have to infer it from the length of the womb; the sound will sometimes tell us at once. In order to be certain, you dilate the cervix by sponge tents and pass in the finger; if you discover a polypus, you must redilate the canal, if you have not already done so sufficiently, and then catch hold of it with the polypus forceps. This is a most valuable instrument; if I could not get its counterpart, I would not part with it for its weight in gold. In removing a stone from the bladder you know that the instrument is passed and the stone caught at hazard. In polypus of the uterus, the same thing can often be done. I have frequently twisted off a polypus in the cavity of the womb when I did not know positively that one was present. The forceps have only to be opened to the width of the polypus plus the thickness of the blades, which is very slight. If the volsella forceps are used, the blades have to be separated fully half an inch more than the thickness of the tumor, in order that its fangs may secure it. This instrument, which is the one frequently advised, has other disadvantages; the womb may be caught instead of the tumor; and further, if after you have caught the polypus you find that it is tearing, it is a diffi-

cult matter to release it without injuring the womb; the fenestrated polypus forceps is therefore the instrument to use.

I have told you the three positions in which polypi are found, but there is a word of caution to be given. A polypus may be exactly mimicked by an inverted womb. Such wombs have been frequently removed, and that by the best surgeons, under the impression that they were polypi, for it is often difficult to determine whether a tumor projecting from the cervix of the womb is a polypus or an inverted womb.

How are you to decide? What are our landmarks? Inversion of the womb is rare; polypus is not rare. An inverted womb is small; a polypus is often large. An inverted womb may, however, be large because it has in its wall a fibroid tumor. An inverted womb is sensitive; a polypus is not. If, before the patient is etherized, you pinch or squeeze an inverted womb, pain will be complained of, but if the polypus is pinched, or a pin stuck into it, the patient will not flinch. An error may come in here that is, a fibroid tumor covered with mucous membrane might be extruded. That membrane is supplied with nerves, and any injury to it would cause pain. In such a case, the error would be on the safe side, for if the tumor were sensitive, you would perform no operation until you were thoroughly satisfied that the body was not the womb. Inversion of the womb is exceedingly rare in virgins and it is not at all common in married women. I have never seen an instance in a virgin. It usually occurs as the result of labor and is recognized at the time. It is then either replaced or the woman dies. The sound will aid in the diagnosis. There will not be a uterine cavity in inversion but if the womb measures two and a half inches, you may be sure that there is no complete inversion. Here comes a difficulty, and here it is where the best surgeons, and the most excellent diagnosticians, have made the mistake of removing a portion of the womb together with the polypus. The womb in trying to extrude the polypus, may become cupped, like the bottom of a wine bottle. The traction made by the surgeon will often do the

same thing. He applies the wire of the ecraseur to what he supposes to be the pedicle, when in fact he has noosed the cupped portion of the womb which is removed with the tumor. It is not always easy to determine whether this cupping has taken place or not. You would be astonished to learn how many good surgeons have removed a portion of the womb with a polypus; many cases have not been reported, for if the result be fatal the case is less likely to be reported. On the other hand, I believe that in many instances a part of the womb has been removed, without the knowledge of the physician, who wondered why his patient died. In the present case, I have not been able to decide whether the tumor is a polypus or an inverted womb, for when I attempted to pass the sound, I could not discover a uterine cavity. I said to this patient, "now I want you to tell me one thing, have you ever borne a child?" This made her quite indignant and from her expression I feel certain that she is a virgin. To-day she is under ether, which makes matters easier.

I shall try to draw the womb down. This will facilitate diagnosis. The pedicle is either fastened to the sides of the os by inflammatory lymph, or else some portion of the womb is inverted. If the woman is a virgin, as I believe she is, the latter is hardly possible, but it does sometimes occur. I tried to pass the sound in my office but did not succeed, but I have now broken an adhesion and the sound enters three inches into the cavity of the womb. I also feel the fundus above the pubes. My conclusion, therefore, is that a fibroid tumor has gradually been forced from the wall of the uterus into its cavity and thence into the vagina, without becoming pedunculated. From the measurement given by the sound I know that the greater part of this tumor is outside of the womb, but it is impossible to say where the tumor ends and the womb begins. I shall therefore try to enucleate the tumor. It is covered by mucous membrane. I slit this membrane and strip it off. In this way I shall take out the tumor without injury to the womb. It comes

off, you see, with some degree of ease but not as readily as the rind from an orange. This is precisely the way in which fibroid tumors within the cavity of the womb are enucleated. Where no pedicle exists, this is the safest way of operating. In enucleating a tumor inside of the uterus I use an Adams's subcutaneous saw to make an opening in the most projecting part of the tumor. I prefer the saw because it is easier to manage in such cramped quarters than the scissors or a probe-pointed knife. Further, the bleeding is less and points can be reached by it that are inaccessible to the other instruments. I make an opening into the capsule as large as possible, sometimes not more than an inch, sometimes two or three inches in length. I then pass my finger and peel off the mucous membrane as far as I can. If possible, the tumor should be removed at one sitting; but if this cannot be done, ergot should be given to induce contractions of the uterus. In a few days, the little wound will be forced open by the tumor and you can then proceed with its enucleation.

I have now removed the tumor. It was not pedunculated, but, as I said, is a fibroid in the process of self-enucleation. I have simply completed what nature had begun. I shall now examine the womb to see whether it has been at all inverted. It is not, and as there is no bleeding I shall do nothing more. Should bleeding occur in such an operation, vinegar is the best haemostatic. I never use Monsel's solution unless driven to it by an alarming hemorrhage. The objections to it are that it produces plaster-like clots; these remain inside of the womb, break down with a bad odor and are liable to cause septicæmia. It is not a safe haemostatic in regions where the tissues are erectile, as about the womb. In such situations, the veins and lymphatics staying open are more likely to absorb septic material than in any other portion of the body where these vessels contract after being cut. Another objection to the use of Monsel's solution is that it so corrugates and contracts the vagina as to interfere with the needful manipulation. Do not,

therefore, use Monsel's solution in operations on the womb. I have often used it in cancer of the cervix, and have never had any bad results, for in this condition there are friable granulations which need corrugation. As this patient will remain in the hospital where she can be watched by the physicians and nurses, I shall not plug up the wound. If I performed this operation in the country where I could not see the patient for several hours, I should cram a sponge into the cavity which formed the nidus of the tumor. I do not like to plug the womb because the blood collects behind the plug and clots. In a few hours it begins to putrefy and give off an odor; in 12 hours the smell is more decided, and in 24 hours it is exceedingly offensive.

There is another variety of polypus of which I neglected to speak. It is a small affair which might seem to you insignificant, and yet has destroyed life. I refer to an enlarged nabothian gland which has become pedunculated. It will be found either partly within the canal and partly without, or just within the os uteri. The finger will usually detect it, but being very small it sometimes retreats within the canal before the examining finger, and the speculum may be necessary for its discovery. Women have actually bled to death from the presence of a small mucous polypus, or a pedunculated nabothian gland, not larger than a pea.

The after treatment of our patient will be simply to keep the patient sweet and clean by vaginal injections of potassium permanganate. Her bowels will also be kept bound for a few days, and she will stay in bed until all vaginal discharges from the sore have ceased.

SOME INTERESTING AUTOPSIES.

BY FREDERICK PETERSON, M. D.

I select from sixty odd autopsies, made this year, a few which I am sure will be of interest to the profession, several from their rarity and several from their real value. For convenience I number them as they appear in my record. The specimens are all preserved in the college museum.

NO. 6—RUPTURE OF LIVER. DEATH THREE DAYS AFTER.

General Hospital—Male, æt. 35; body well nourished; in left side of frontal bone a wound one cm. in diameter penetrating to brain; ankylosis of left elbow joint at right angles, from old injury; over back of joint a scar.

Brain not examined.

Chest: On opening, found diaphragm on right side reaching to space between third and fourth ribs, liver close to it and invisible under ribs; transverse colon also far up under costal cartilages and xyphoid appendix; stomach pushed up; left lung in a state of engorgement, with here and there fibrin exudate in lobules; in both pleural cavities a small quantity of bloody serum; upper lobe of right lung normal, but middle and lower completely atelectatic by pressure from below; heart normal; chronic atheromatous disease of arteries generally, aorta, throughout, and bifurcations; simple fracture of eighth and ninth ribs on right side.

Abdomen: In peritoneal cavity, one and one-half litres of blood; spleen normal; liver exceedingly fatty, and, besides displacement upwards, a large radiating rupture near suspensory ligament, on convexity, deep into liver substance and entirely through the capsule; on under surface, near gall-bladder, an old cicatrix, possibly from an old tumor cavernosus or echinococcus cyst; stomach and intestines normal; bladder normal; in left kidney several small cysts, otherwise both normal.

Remarks: This man was thrown violently from a vehicle by a runaway team, and lived three days after the perforation of his skull and rupture of the liver, with internal hemorrhage. The fatty degeneration, so marked, was naturally subsequent to and a result of the rupture. Still this is not so astonishing when we consider that the liver has been known to degenerate to an equally marked degree in phosphorus poisoning in twenty-four hours.

NO. 13—PURPURA HEMORRHAGICA.

Patient of Dr. C. Diehl, Jan. 10—May P., æt. 6 years, English; dead thirty-six hours. Body well nourished; death marks not very distinct; upon left forearm an irregular red patch, an ecchymosis, not elevated, one inch in diameter; upon right thigh several such; upon chest a large number, some fully an inch, some but the size of a pea, in diameter; there was separation of the epidermis upon the larger of these.

Head: Membranes and sinuses of brain normal; ventricles normal; brain substance everywhere apparently normal.

Chest: Lungs normal; heart normal, a few clots of pure fibrin in both sides; pericardium and endocardium normal.

Abdomen: Spleen slightly enlarged, not soft, and had a very peculiar appearance, as if every malpighian body were a soft white tubercle; upon examining these under the microscope they were found to consist of white round cells, some dumb-bell shape, some with protuberances, and in fact in all stages of fission. Liver was enlarged, in parts fatty, hard and with acini exceedingly well defined, cut hard (child had been taking spirit daily for a long time previous); under microscope the connective tissue of the liver was full of young cells, and the white cells were also in great numbers between the liver cells, which were fatty. Each suprarenal capsule was very large, injected, and both had large extravasations of blood in their substance; kidneys and ureters normal; Peyer's plaques in ileum swollen and with capillary injection; vermiform appendix normal, but eight inches in length; mesenteric glands much enlarged and soft; upon whole of peritoneum, both parietal and visceral, minute extravasations of blood two lines in diameter; the same were found in the mucous membranes of bladder and uterus.

Remarks: An autopsy on such a case is rare. Some of the lesions here noted have not been reported before. The child was, save an anæmic look, in good health until January 7th, on the afternoon of which day she became delirious. The spots

appeared that day. There was no fever, but pulse frequent. Died the afternoon of next day, having had a few convulsions. This is not the place to discuss the etiology of purpura and allied diseases, and I leave it for another occasion.

NO. 14—PUERPERAL SEPTICÆMIA.

General Hospital, January 11—Inga C., æt. 28, Norwegian emigrant; body well nourished; abdomen greatly distended.

Head: Brain and its membranes normal.

Chest: Unusual quantity of serum in pericardium; minute extravasations of blood on pericardium; soft fibrinous clots in right heart; dark, perfectly fluid blood in left heart; mitral valve thickened, grown together so as to cause stenosis, and had minute *vegetations globuleuses* upon its borders; tricuspid also thickened and with small vegetations upon its edges; fatty degeneration of heart muscle; pulmonary valve normal; aortic thickened and retraction of one lunula caused insufficiency. A little serum in both pleural cavities; both pleuræ free from adhesions, but contained numerous ecchymoses, and on right side a little lymph; right lung was œdematous and contained four hemorrhagic infarcts; glands in mediastinum much enlarged, one containing five or six tubercles; left lung contained six infarcts from two to five cm. in diameter.

Abdomen: Stomach enormously distended, reaching to umbilicus, filled with brown, grumous fluid, its capillaries intensely congested, some bleeding. Acute inflammation of spleen and five infarcts in that organ; liver enlarged and fatty; walls of gall-bladder thickened with catarrh; pyelitis in both kidneys, in left kidney five infarcts, in right kidney two infarcts; in peritoneal cavity, one litre of serum containing fibrin; ovaries and vessels of broad ligaments all normal; vessels of mucous membrane of uterus much engorged and membrane roughened; at fundus, the inflammation of mucosa almost diphtheritic in character.

Diagnosis: Puerperal septicæmia.

Remarks: This woman had been delivered fifteen days before her death. It is noteworthy to see how general was the disease. There was a slight peritonitis, and a little pleuritis; there was endocarditis as a result of blood infection, and this was followed by the formation of renal, splenic and pulmonary infarcts. As in all acute specific fevers, there was fatty metamorphosis of liver, heart and kidneys, and softening of spleen. The stenosis of mitral, and insufficiency of aortic valves were lesions, of course, of long standing. The point of infection in this case was evidently the uterine mucosa, which was found inflamed.

NO. 16—URETHRAL STRICTURE. PYEMIA.

General Hospital, Jan. 12—McMillan, æt. 42, English; dead twelve hours; body emaciated; rigor mortis marked.

Brain not examined.

Chest: Old adhesions at apex of left lung, with six or seven small tubercles; same in right lung, with adhesions at base; in middle lobe of right lung, anterior surface, perforation from a cavity containing green fetid pus; two other such pus depots in other parts of the same lung near surface; marks of old pericarditis; mitral valve thickened; otherwise heart normal.

Abdomen: Spleen enlarged and very soft. Liver slightly enlarged, soft and fatty. Both kidneys enlarged, soft and with roughened surface; pyelitis; in one kidney two old infarcts. Bladder contracted; three diverticula; mucous membrane intensely congested, and in lower part several diphtheritic patches. The urethra presented the following: one large stricture in middle of spongy portion, with false passages filled with pus; strictures in membranous portion, with two false passages, one leading to a scrotal abscess. The prostate gland was hypertrophied. There was catarrh of the rectum. All other organs normal.

Diagnosis: Pyemia from stricture and false passages leading to suppuration, diphtheritic cystitis, pyelonephritis and metastatic abscesses in right lung.

Remarks: It is but proper for me to state that these false passages in the urethra were made before entry of patient into the hospital.

NO. 48—URETHRAL STRICTURE. PYELONEPHRITIS.

General Hospital, June 4—Wm. F., æt. 35; dead twenty-eight hours; rigor mortis still present; body well built and slender; small sores about nose and mouth; scrotum about five times normal size, and, with penis, black with gangrenous blisters and putrid in odor.

Head not examined.

Chest: Hypostatic congestion and œdema of lungs; no adhesions of pleural surfaces. Old adhesions of apex of heart to pericardium in front; beginning atheroma of aorta; heart walls somewhat fatty; valves normal.

Abdomen: Spleen double usual size, very soft and flabby. Liver fatty. Both kidneys enlarged, with dilated pelves and pyelitis, and very soft and flabby. Bladder full of bloody urine, and mucosa covered with ecchymoses. Urethra full of strictures and false passages leading into scrotum below, where were numerous abscesses and blood clots. Ileum normal. Some gastritis.

Diagnosis: 1. Stricture of urethra, with false passages. 2. Extravasation and infiltration of urine into cellular tissues. 3. Gangrene of scrotum, cystitis and pyelonephritis as a result.

NO. 20—AIR IN THE VEINS.

Erie Co. Almshouse, Feb. 1—L. M. V., female, æt. 18, prostitute; body well nourished; medium size.

Head: No change in brain or meninges.

Chest: Thyroid gland enlarged. Blood-tinged mucus in trachea. Two ounces of sanguinous serum in pericardium; hundreds of minute extravasations on pericardium; in *left* heart, usual fibrinous clot, with *black* fluid blood; in *right* heart, a small amount of *bright red* foamy blood and no clot; musculature of heart somewhat fatty. Old adhesions on right side of chest;

none on left; purulent bronchitis; great hypostatic congestion of lungs; two hemorrhagic infarcts in right lung, lowest lobe, nearly size of walnut.

Abdomen: Minute extravasations of blood all over omental peritoneum. Spleen normal. Liver in superficial parts fatty in patches; left lobe very large, in close connection with spleen and completely covering stomach. Congestion of suprarenal capsules. Great congestion of kidneys, and marked fatty degeneration of cortex. Ends of fallopian tubes engorged with blood. Bladder greatly distended with urine. Uterus size of new-born infant's head, soft, flabby, filling pelvic cavity, and containing a large four-ounce coagulum, fastened to place of placental attachment; large blood clots in vagina, and great congestion, but no other sign of inflammation. Mammæ filled with milk.

In left knee-joint about sixteen grammes of clear serum, with a little fibrin, showing under the microscope fibrin and dividing white blood cells; in right knee-joint a small quantity of synovial fluid, and also in both elbows.

Remarks: This patient was eight months pregnant, and had an attack of inflammatory rheumatism, which caused her to abort. Only the left knee-joint was affected. Her death was from asphyxia, to which the spots of Tardieu bear witness. The death was not sudden, but was unexpected to the attendant. The literature upon death from air in the veins is surprisingly small, and with regard to the morbid anatomy in such cases, I find nothing. Do the air bubbles act as emboli? Were they the cause of the two infarcts in the right lung? I experimented with water mixed with air, forced gently through glass tubes, which I drew out into the finest possible capillary tubes. The air, of course, passed through readily, the bubbles elongating and minutely dividing. Still it may be vastly different in the microscopic capillaries of the lungs. The body was frozen, therefore no decomposition had taken place.

NO. 22—INTERNAL ABDOMINAL HERNIA.

Insane Asylum, Feb. 25—H. C., female, æt. 60; dead nineteen hours. Great emaciation of the body and anæmia.

Brain not examined.

Chest: Pleural surfaces normal; emphysema of lungs from senile atrophy; in left pleural cavity small quantity of bloody serum. Slight thickening of some valves of heart; atheromatous degeneration of aorta; fatty degeneration of myocardium; no clots and no blood in heart or large vessels.

Abdomen: Spleen normal. Fatty degeneration and senile atrophy of liver. Granular atrophy of both kidneys. Aorta at bifurcation of iliacs solid with lime from atheromatous process. Bladder thin-walled and distended with urine. Ovaries and uterus atrophied. Slight chronic gastritis. From omentum majus going down to mesentery of sigmoid flexure was a cord-like piece of tissue, about four mm. thick, congested, which formed a circular aperture about seven cm. in diameter, and through which about half of the loops of the ileum projected, thus forming an internal hernia.

Diagnosis: Emphysema; granular atrophy of kidneys; anæmia.

Remarks: The chief interest is, of course, the internal abdominal hernia. There were no signs of old adhesive inflammation, and the malformation was probably congenital. The narrow cord itself, however, had grown hard from constant and chronic irritation. In the history of the case was nothing to show that this had ever caused any trouble. The aperture was too large to compress in any way the canal of the ileum.

NO. 23—ALVEOLAR SARCOMA OF SEROUS MEMBRANES IN BOY OF TWELVE YEARS.

Patient of Dr. Tobie, March 13—Kearns, æt. 12, male, Irish-American; dead ten hours. Body very anæmic and emaciated; arms thin; legs, scrotum, penis and abdomen œdematous to enormous degree; veins on abdomen, neck and forehead, extremely enlarged.

Brain not examined.

Chest: In each pleural cavity some 300 ccm. of sanguinous fluid; upon the pleuræ, in different portions, numerous millet-seed growths, some as large as peas, and extending into lung tissue, of white, medullary nature; on right side, adhesions at apex; no tumors in lungs themselves; lungs congested and œdematous; heart and valves normal; a few white agonia clots; in pericardium some 150 ccm. of clear serum; pericardium itself normal.

Abdomen: Contained sixteen litres or more of sanguino-purulent fluid; peritoneum inflamed; everywhere covered with thousands of growths, from size of a pea to ten and even fifteen cm. in diameter, of soft medullary consistence; the diaphragm on abdominal surface one mass of this tumor one and one-half cm. in thickness. Liver, gorged with blood, contained a few of these nodules in its capsule, extending into the liver substance itself, with undefined edges, as those of pleuræ into lungs. The omentum majus was thickly covered with these. The bladder had become one mass of the growth fifteen cm. in diameter, leading to dilatation of ureters and hydronephrosis. The mesentery everywhere covered with large and small tumors, involving the loops of the ileum in their masses. Spleen normal. Stomach normal. Gall-bladder had become a mass of this white tumor and was not to be found.

Diagnosis: With the microscope there was no difficulty in recognizing the tumor as alveolar sarcoma.

Remarks: Such extensive malignant disease of pleuræ and peritoneum in a child is remarkably rare. Six months before his death the patient had scarlet fever. Previous to this he was perfectly healthy. Four months ago the tumor began to develop. There are one or two cases on record where sarcoma has rapidly developed as a sequel to scarlatina.

NO. 26—A PATHOLOGICAL MUSEUM. HERMAPHRODITISMUS SPURIUS.

General Hospital, March 21—Henry S., sailor, æt. 50; body well nourished; lower extremities œdematous.

Brain not examined.

Chest: In left pleural cavity two litres of serum; partial atelectasis of left lung; no adhesions; in right cavity three litres of fibro-purulent serum; right pleura everywhere covered with pus and fibrin; in right lung atelectasis complete, combined with caseous pneumonia. Heart hypertrophied on both sides; stenosis of mitral valve, hardly passing one finger; one wing of mitral valve contained a deposit of lime five mm. thick and two by one cm. in length and breadth, over this being a large atheromatous ulcer with vegetations; left and right hearts filled with soft post mortem clots; tricuspid and pulmonary valves normal; thickening and stenosis of aortic, each lunette containing calcareous deposit; beginning atheromatous process in aortic arch; weight of heart 496 grammes or fifteen and one-half ounces.

Abdomen: Spleen atrophied, weighing ninety-six grammes. Liver somewhat fatty and enlarged, weighing three and three-fourths pounds. In right kidney scars of old cysts and granular atrophy; in left kidney one colloid cyst, four scars, and granular atrophy. Bladder very small, with hypertrophied walls one and one-fourth cm. thick, and cavity not larger than a hazel nut, containing some pus. Contraction of ascending colon (cæcum being of normal size) of transverse and descending colon and rectum to size of little finger, from large old ulcers five by seven cm. in dimensions; just above chief stricture in ascending colon an irritative inflammation of mucous membrane; ileum showed no signs of previous ulceration.

Penis not more than eight cm. in length; had no prepuce, and only a groove on under side for a urethra; urethral opening at the perineo-scrotal junction about three cm. in front of anus; this was large enough to admit of passing one finger directly into bladder. Both testes had but just reached a little way into the inguinal opening, and lay with their epididymes upon the pubic bone; testes no larger than beans, somewhat surpassed in size by the epididymes; on the membranes about both were several pellucid colloid cysts.

Diagnosis: Caseous pneumonia giving rise to pleurisy, and empyema immediate cause of death; mitral and aortic stenosis leading to œdema of lower extremities, and cardiac hypertrophy; intestinal obstruction as a result of former ulceration (kind unknown). Finally, non-descent of testes and hypospadiæ.

Remarks: The penis was so small as to pass for an enlarged clitoris, and the urethral opening might easily have been mistaken by an ignorant person for a vagina. There was no scrotum, and the small testes on the pubic bone caused the pubic region to appear like a mons veneris. It was in fact a case of hermaphroditismus spurius.

NO. 31—DEATH AFTER RESUSCITATION FROM DROWNING.

General Hospital, April 18—Alfonso Vienocolo, laborer, æt. 22; dead seventeen hours; body well built, small, well nourished; rigor mortis still present.

Brain not examined.

Chest: Acute double pneumonia and bronchitis; stage of red hepatization; slight fatty degeneration of heart.

Abdomen: Spleen normal; liver, in parts, fatty, greatly congested and minute subcapsular hemorrhages in great number; kidneys soft and fatty; bladder greatly distended with urine; venous engorgement everywhere.

Diagnosis: Acute double pneumonia, caused by water inhalation.

Remarks: The man was drowned, immediately resuscitated, and died two days after the accident.

(To be continued in next number of Journal.)

Selections.

CATARRH OF THE NASO-PHARYNX, OR AMERICAN CATARRH.

[After defining the disease, and giving a short account of its very meagre literature, the lecturer remarked that postnasal catarrh was much more common in this country than was generally supposed, but that it was much milder than in America, where it was so universal that it might be looked

upon as the national complaint. In referring to the cause of this affection, the lecturer gave the results of his recent observations in America in the following terms.]

Though I would not for a moment place my experience of American catarrh on a level with that of any of the eminent specialists who have given attention to the subject in the United States, I may remark that, in a recent tour through that country, I had a very favorable opportunity of studying the complaint; for I not only saw examples of the disease over a very wide tract of country, but also observed the atmospheric conditions under which these cases occurred—enjoying, moreover, the great advantage, in many localities, of discussing the subject and hearing the views of able physicians who had been studying the affection on the spot for many years. I was greatly astonished at the very wide diffusion of the affection. I met with it all over the Eastern States; it was very common in Chicago and St. Louis, which may now be called the central cities of America; I found it prevalent in Nebraska, and, to a slighter extent, in Utah; and, again, I encountered it on the Pacific coast, finding it very common in San Francisco. I had not the opportunity of seeing any patients in Nevada, as I merely traveled through that State without stopping; but in London I have treated many American travelers for postnasal catarrh, who had acquired the disease on the alkaline plains of the Silver State. I also saw a good many patients suffering from catarrh of the naso-pharynx in Colorado. In Southern California and Arizona, I scarcely met with any cases; and in Canada the affection, though much more common than in Europe, did not seem to be so universal as in the States. American catarrh, it would seem, principally prevails between latitude 44° and latitude 38° .

My travels in America were made in the latter end of August, and in September and October—that is, during the most favorable season of the year; and I have little doubt that, had I been there in the winter, I should have seen a great deal more of

this wide-spread ailment. In many of the regions referred to, there are local conditions which tend to irritate the mucous membrane. Thus, all along the entire Eastern sea-board the atmosphere during the winter months is cold and moist, whilst in the summer it is excessively hot. In San Francisco, fogs prevail in the summer months in the early part of the day, whilst in the afternoon a cutting wind blows continuously. In Colorado, on the other hand, the climate is so extraordinarily dry, that only those who have been there can thoroughly appreciate it. The inhabited portion of the country consists of extensive plains situated at an elevation of 5,000 or 6,000 feet above the level of the sea. The dryness of the climate may be gathered from the fact that not a drop of rain falls during nine months of the year, the result being that no trees can flourish, the scrub oak being almost the sole representative* of our forest trees, and this being only found in the narrow valleys, or cañons, as they are called. Indeed, so extremely dry is the soil, that not unfrequently all the prairie-grass perishes. The atmospheric conditions, though admirably suited for some forms of consumption, are nevertheless extremely irritating to the mucous membrane of many persons. The white alkaline dust, which covers hundreds of miles in Nevada, is also met with here and there in Colorado. In the winter and spring, the winds are often rather strong, and it will easily be imagined that at such times the abundant dust of this extraordinarily dry country is very irritating.

The soil of the American continent differs so widely in different parts, that it is impossible to suppose that it is concerned in the etiology of the affection. Again, it will be readily understood that the meteorological conditions over this vast area are so various, that they can not be regarded as a cause acting with anything like uniformity. The general character of the atmosphere of the American continent, as compared with that of Great

*The cotton-tree, though indigenous in certain parts of South America, appears to be an exotic in Colorado, and I only saw it as an ornamental tree in the streets and gardens of some of the cities.

Britain, and also with most parts of Europe, is that it is drier, that the changes of temperature are more sudden, and the extremes of temperature much greater. There is nothing, however, in these conditions to account for the localization of the complaint in the naso-pharynx; and it would seem that postnasal catarrh is not due to what may be strictly called climatic influence, but to something which is accidentally introduced into the atmosphere of widely differing localities; in other words, that there must be irritant particles floating in the air over very wide areas. This is actually the case, for *dust* is to be found everywhere in America.

The universal prevalence of catarrh is, indeed, fully explained by the abundance of dust, both in the country and in the cities. Owing to the immense size of the country, and its sparse rural population, the country roads have not, as a rule, been properly made, and, except in some of the older States, are merely the original prairie tracks. In the cities, notwithstanding the magnificence of the public buildings, the splendor of many of the private houses and the beauty of the parks, the pavement is generally worse than it is in the most neglected cities of Europe; such, indeed, as are only to be found in Spain or Turkey. It must be recollected also that, whilst in the decayed towns of the Old World there is very little movement, in the American cities there is a ceaseless activity and an abundance of traffic. Hence, the dust is set in motion in the one case, but not in the other. The character of the dust, of course, varies greatly, according to locality. In some parts, it is a fine sand, in others an alkaline powder; whilst in the cities it is made up of every conceivable abomination, among which, however, decomposing animal and vegetable matters are not the least irritating elements. An idea may, perhaps, be formed of the state of the atmosphere, from a consideration of the fact that in many cities the functions of the scavenger are quite unknown.

That a dusty atmosphere is the real cause of postnasal catarrh is rendered probable by a consideration of the anatomical re-

lations of the naso-pharynx. For, owing to its being a *cul-de-sac* out of the direct line of the respiratory tract, particles of foreign matter which become accidentally lodged in its upper part are got rid of with difficulty—most likely by an increased secretion, which, as in the case of the conjunctiva, washes away any gritty substance which may temporarily alight on the membrane. As regards the larynx, irritating dust is expelled by coughing, which may be either reflex or voluntary; and again, in the case of the nasal passages, the minute particles of matter which constitute dust are expelled, if they happen to be obnoxious, either by sneezing or blowing the nose. But reflex acts, such as coughing and sneezing, have no effect on the upper part of the naso-pharynx, and it is only by a voluntary act, known as “hawking,” that this cavity can be partially cleared. It is probable also that, owing to the sensibility of the naso-pharyngeal mucous membrane being less acute than that of either the nose or the larynx, minute foreign bodies accidentally lodged in the vault of the pharynx do not cause an amount of discomfort at all corresponding to that in the adjacent parts; hence, particles of matter are more likely to remain *in situ* for a long time in the postnasal region than in either of the other parts, and are, of course, very apt to set up disease. In this country the complaint is most common in persons whose pharynx is large in the antero-posterior direction, a form of throat which facilitates the entrance, without favoring the expulsion, of foreign particles.

Whilst, however, it is highly probable that dust is the most frequent cause of postnasal catarrh, no doubt it is not the only one. Many circumstances favor its development. Some physicians have attributed it to the custom of over-heating houses by hot air and steam, as is commonly done in America. In the winter, the temperature is never allowed to fall below 70°, and it is generally much higher. The sudden passage from this temperature to that of the street is often not unlikely to set up catarrh; but as the same mode of heating is used in Russia

without, as far as I am aware, giving rise to any postnasal affection, its influence can not be very great. The importance of heredity in the etiology of catarrh has been recently strongly insisted upon by Bresgen (*Der Chronische Nasen und Rachen-Katarrh*, Wien und Leipzig, 1883, p. 47); and, although no extensive series of exact observations have yet been made on this point, there is every probability that a disposition to catarrh may be inherited. I have seen so many instances, however, in which foreigners making a short stay in America have become affected with postnasal catarrh, that I think there is little doubt that atmospheric conditions—and those, let me add, of an accidental and controllable character—are much more powerful than heredity.—*Morell Mackenzie, M. D., in The British Medical Journal.*

ON METRIA (SO-CALLED PUERPERAL FEVER).*

Your secretaries have requested me to initiate a discussion on the subject of Metria—a term which includes a number of affections which, though allied in some respects, are in others very dissimilar, but all of which are commonly classed together under the very incorrect title of “puerperal fever.” I admit the force of their argument, that no more important or practical subject could be brought forward for discussion here; but I hesitated to accede to their wishes, because it is very recently that I read before the Obstetrical Section of the Dublin Academy of Medicine a paper on metria, which has already appeared in print, and from which my present communication cannot possibly materially differ. But, as your secretaries still consider it advisable that I should bring the subject under the notice of this Section of the British Medical Association on the occasion of its annual meeting, I consented to do so.

The pathology of metria is still far from being perfectly understood. Two facts alone are admitted by all who have

* This paper was prepared by Dr. Atthill, who was announced in the programme to open the discussion on the subject. He was, however, not present, and his paper was not submitted to the Section. It is published here to make the series of papers on the subject complete.

studied the subject carefully, namely: first, that puerperal women are liable, under certain circumstances, to be inoculated with septic matter conveyed to, and deposited in, the vagina, by the hands of the attendants, as well as by other agencies, when, either through carelessness or ignorance, proper precautions have not been adopted to prevent such an occurrence; and that the disease produced by such inoculation is not an unfrequent source of one of the forms of metria; secondly, that puerperal women may be self-inoculated by poisonous matter originating within their own bodies, from the decomposition of blood-clots formed within the uterus after parturition, or of portions of the membranes or placenta which have been retained *in utero*, the only difference of opinion on this point being, that Dr. Matthews Duncan and others term the disease thus produced "sapræmia"—that is, resulting from the absorption of putrid matter—thus distinguishing it from "septicæmia," or the disease produced by "organisms which, when conveyed to the blood, multiply indefinitely in it;" while those which are the product of putrefaction "do not survive, far less grow, therein." (Dr. Matthews Duncan on Puerperal Fever, *Lancet*, Nov. 6th, 1880.)

I hardly think that any one will dispute the correctness of the foregoing points; they have been established beyond all doubt; and it is certain that poison, introduced into the system by one of the two ways indicated, is the cause, in the vast majority of cases, of so-called puerperal fever, whether occurring in private or hospital practice. But there are many who believe that the whole subject is summed up in a belief of these very important propositions, and who think that to go outside these lines is only to cause difficulty and to create confusion. I admit this; but it seems to me that such an argument is almost an appeal *ad misericordiam*, and that it cannot be admitted for a moment. I believe that, in addition to the two preventable forms alluded to above, we have others; and I ask the members of this Section to consider whether we have not, in addition to these, two

other forms of metria, which it may not be possible to guard against, namely:

1. A form of self-infection, occurring under special conditions, to which I shall allude by and by, which is not preventable by the adoption of any antiseptic treatment.

2. An epidemic, highly infectious form, which spreads by the same means as ordinary epidemics do.

Before commencing the discussion of these propositions, it is essential to bear in mind that I entirely concur in the opinion now generally held, that septicæmia, occurring in a puerperal woman, is not capable of being communicated to another puerperal patient by any means other than the direct transfer of the infectious matter to some portion of the mucous membrane lining the genital track. Septicæmia, however, when it attacks a puerperal woman, may be spread by various agencies, as well as by the hands of the attendant—for instance, by the nozzle of a syringe, by the use of infected sponges, by imperfectly washed napkins, bed-linen, etc.; but not through the medium of the air breathed by the patient. Of the truth of this I have not the slightest doubt.

You will observe that I have spoken of the two ordinary forms of puerperal septicæmia as being preventable. It is evident that, with thorough cleanliness, and the use of antiseptic precautions, septic poison should never be introduced into the patient's system by the attendants; further, I believe that it is possible to prevent self-infection in a healthy woman, by adopting precautions to insure a good and permanent contraction of the uterus, and by washing out the uterus whenever we have reason to suspect the existence of clots, etc., in it, with a disinfecting fluid. With the former object I make it a practice to put all patients in whom a relaxed condition of the uterus exists, on ergot, from the moment labor terminates, continuing its administration for at least a week. I believe a relaxed condition of the uterus to be a very common predisposing cause of self-infection in puerperal women; it favors the formation of clots, *in utero*,

and also, the orifices of the uterine sinuses being left open, the absorption of septic matter is favored.

In proof that I do not exaggerate the importance of imperfect contraction of the uterus, as a main factor in the production of puerperal septicæmia, I may point out that I recently saw, in consultation, three patients suffering from this affection, in all of whom labor had been so rapid that the child was born before the arrival of the medical attendant; and, it is a well-known fact, that relaxation of the uterus is very liable to follow the too rapid emptying of that organ.

This train of reasoning has led me to believe that imperfect uterine contraction is one of the causes of the frequent occurrence of septicæmia in unmarried women. The mortality from septicæmia amongst them is very great, and there is no doubt but that the great mental distress these poor creatures suffer interferes with the recuperative process which should take place rapidly in the uterus after parturition. The muscular fibres of the organ do not contract as they should; the blood-supply, consequently, is not cut off, the mouths of the sinuses remain open, the denuded placental site, instead of becoming rapidly restored to its normal condition, becomes unhealthy, and the foetid discharge, which, under these circumstances, takes the place of the normal lochia, enters the system, either directly through the open mouths of the placental sinuses, or is absorbed at the site of some fissure in the mucous membrane lining the genital track. This is one form of puerperal septicæmia which I fear is beyond the reach of preventive treatment. No antiseptic precautions can prevent its occurrence, no treatment that I know of will stay its progress. In patients suffering from certain forms of chronic disease a similar condition is observed, and similar results follow.

In my opinion, the infection arising from any of the forms of metria to which I have alluded, cannot be carried by the attendants from one patient to another, if precautions be adopted to prevent it. And only a year ago I was strongly inclined to be-

lieve that epidemics of so-called puerperal fever would not occur so long as such precautions were adopted. Those enforced by me among the pupils attending the Rotunda Hospital were the following:

1. Students attending the practice of the hospital should not undertake post mortem examinations, be engaged in dissections, or attend an hospital containing patients suffering from infectious diseases; and

2. Before proceeding to examine any patients, they washed their hands in a solution of carbolic acid. During the first six years and a half of my mastership, these sufficed to prevent the occurrence of anything like an epidemic of so-called puerperal fever. Deaths from septicæmia, especially among unmarried women, from time to time occurred, but the disease never spread. In August last, however, the hospital being at the time extremely healthy, a patient was admitted who complained of pain in the abdomen, and who vomited constantly, the fluid ejected being greenish. She stated that she had been in labor for more than twelve hours, and that, during the whole of that time, she had been vomiting; and it was subsequently elicited that she had been complaining for some days previously, and also that she had been seen, at the commencement of labor, by some practitioner, who advised her to go into hospital. The os, at the time of admission, was about one-third dilated; labor progressed very slowly, and she finally was delivered by the forceps. Vomiting ceased after delivery for a time, but soon recurred, everything swallowed being ejected, with large quantities of greenish fluid. The abdomen became tympanitic, the pain intense, matters went from bad to worse, and she died on the fourth day after delivery. Her appearance strongly resembled that of a patient suffering from typhus fever.

Another patient was admitted on the same day as the last patient, and she lay for a short time in the bed next to her. This patient's labor also was slow, but it terminated by the natural efforts. She was attacked with symptoms of acute peri-

tonitis thirty-six hours after delivery, and almost immediately afterwards we noticed a very peculiar, almost black appearance of the face. The course of the disease was identical with that of the preceding case, but was even more rapid. The first symptoms showed themselves on the morning of the 29th, and she died on the 31st.

The disease now spread rapidly, and so virulent was the epidemic that out of twenty-nine women admitted during six days which intervened between the delivery of the first patient and the issue of the order to refuse admission to all applicants, eleven women were attacked and nine died.

The admission of patients being stopped, the wards were thoroughly disinfected, the walls lime-washed, the floors washed with a strong solution of chloride of lime, the cupboards, presses, etc., scoured, the nurses' clothes, as well as their bedding, being washed and aired, and placed in the hot-air chamber. Patients were re-admitted on September 12th; and from that date until the expiration of my mastership, on November 4th, during which time 118 women were admitted into the hospital, the health of the patients was excellent, and, I am informed, continues to be so still. No more successful effort to stamp out disease than this was ever recorded. This, and the fact that the epidemic was distinctly imported into the hospital, and that it did not originate in it, are facts as important as they are satisfactory: and though the occurrence of the outbreak was a cause of great distress to me, and though it was a great disappointment that, at the very close of my mastership, such a misfortune should have happened, still these two facts lessened the regret I naturally experienced.

Some years previously, a patient suffering from erysipelas of the head and face was, during the night, sent up to the labor-ward, her condition not having been detected till she was being undressed. The child's head was in the perinæum, and she could not be sent out. She was at once removed to a separate ward, and early next morning transferred to a fever hospital;

but though her stay in the Lying-in Hospital was so short, several patients were attacked, not with erysipelas, but with so-called puerperal fever, and one died. The disease was limited to the one ward. I ask you, gentlemen, to consider what the disease attacking these women was. To me it seems to have been a disease originating by the introduction into the system of a puerperal woman of the infection of erysipelas, which infection was modified by the peculiar state of the system and of the blood which exists in puerperal women, and which, therefore, developed an apparently different disease; and I am strongly inclined to the belief that outbreaks of so-called puerperal fever, when it assumes an infectious and epidemic form, are due to the introduction of the poison of some ordinary zymotic disease into the system of a puerperal patient, the symptoms being, under such circumstances, totally different from those occurring in cases of septicæmia.—*Lombe Atthill, M. D., in British Medical Journal.*

ORGANIC DISEASE OF THE HEART.*

GENTLEMEN—To-day I propose to give you a kind of practical exercise in diseases of the heart, and, bringing before you a number of cases, none of which I have myself examined, endeavor to call to your attention such points in diagnosis and treatment as may arise in connection with them, and which may be of service to you in your study of this important subject. The first patient being now before us, I will proceed at once to make an examination in reference to his heart, without obtaining any history or asking any questions in reference to his present condition. On looking at the man we notice, in the first place, that he has no embarrassment in breathing, and that there is no cyanosis present. In regard to his heart we note that two movements are visible upon the chest-walls, one systolic and the other diastolic. Now let us see whether the heart is enlarged or not. The apex-beat is in the sixth intercostal space, on a

* Lecture delivered at Bellevue Hospital, New York, May 18, 1883.

vertical line with the nipple, which indicates that while the organ is enlarged, the degree of enlargement is not very great. On auscultation it is found that the first sound of the heart reaches its maximum intensity at this point. The next point is to find how large a portion of the heart is uncovered with lung tissue. The normal area of cardiac dullness, as you are aware, is of the general shape of a right-angled triangle, and here we find that this area of superficial dullness is at least double the normal size. We have thus made out the undoubted existence of a certain amount of enlargement of the heart. Whether this enlargement is due to hypertrophy or to dilatation is a very simple matter to determine. If there is hypertrophy there will be increased impulse, and if dilatation, weakened impulse. It is well to remember, however, that the apex-beat may be feeble while the impulse above that is quite strong. When this is the case it is due to a change in the shape of the heart, the organ having become more globular in outline. The next point in the differentiation between the two, is to find out whether the impulse is of a heaving or sharp character. It is found to be of the latter, which results from dilatation; and we have in this case, therefore, enlargement of the heart with predominant dilatation.

In some cases enlargement of the heart is due to disease of the kidney, in which case the left side of the organ is principally affected, and in others to pulmonary emphysema, where the right, side is enlarged. As a general rule, however, this pathological condition is dependent on valvular disease of the heart. There is certainly no emphysema present in this case, and presuming that there is no kidney trouble either, we will look for evidence of disease of the valves; and as the left side of the heart is far more commonly the seat of such affections than the right, we will make our examination of that first. We may have, as you know, either regurgitation or obstruction present, or both combined, and by means of auscultation we can usually determine what the condition is without difficulty. On applying

the stethoscope to the left side of the heart here I get a soft, bellows-like murmur, synchronous with the first sound of the heart, which reaches its maximum intensity at the apex, and which is also transmitted beyond the apex to the left. There is no presystolic murmur noticeable, and we decide, therefore, that there is present in this case a regurgitation from the left ventricle into the left auricle, or mitral regurgitation, as it is called. Auscultation of the aortic valves, by placing the stethoscope in the second intercostal space, just to the right of the sternum, shows a negative result. The case, therefore, is a perfectly simple one, the enlargement of the heart depending on mitral insufficiency, which always leads to more or less increase in the size of the right ventricle, as is the case here.

One point of considerable practical interest in such a case as this, is to compare the aortic second sound with the pulmonic second sound in order to form some idea of the degree of insufficiency existing. It is known that where there is hypertrophy of the right ventricle the pulmonic second sound is intensified, and in proportion, as a rule, as the second aortic sound is weakened, is the amount of mitral insufficiency present. In the present instance, I may say, there is a condition of affairs which can be tolerated almost indefinitely by the system, and I would warn you, in cardiac affections generally, not to form too hasty a prognosis of impending serious trouble.

Now, in order to make the case more complete, let us ask a few questions of the patient; but before doing so I will venture to predict, with a very considerable degree of confidence, that this man has had acute articular rheumatism at some period of his life. Yes, he says that he has had the disease, the first attack fifteen years ago, and the last, three years ago. He does not give any history of endocarditis in connection with any of his attacks; but this is a complication which frequently escapes notice altogether. Yet its effects are apt to be of a permanent and serious character, and in this case it has undoubtedly led to the organic disease which is now present. In such a condition

of the heart the patient after a time finds that he suffers more or less from shortness of breath in taking exercise which formerly produced no such effect, and that is the chief trouble here. The man says he "gets out of wind," and with this exception he is really quite well. This, then, is a perfectly typical case of simple mitral insufficiency, without mitral obstruction, and without any complicating disease of the aortic valves; typical as regards, first, the physical signs present; second, the connection of the trouble with acute articular rheumatism; and third, the general symptoms.

Finally, let us inquire what are the therapeutical indications in such a case as this? Too many practitioners under these circumstances resort at once to digitalis. Given a case of disease of the heart, and digitalis is prescribed as a matter of course. But in the present instance digitalis is not called for at all. All remedies which cause depression and disturbance of the system are contra-indicated, first, because they would accomplish no good, and secondly, so far as they had any effect it would be an injurious one. What we have to do here is to see what the man needs to put him in the best general condition possible. It is of the most importance to him to have good, nourishing alimentation, and if his digestion is defective, he should have appropriate remedies to improve it. In this case there is merely a question of toleration, and as long as the general system is in good condition, the heart is not likely to give rise to trouble. The patient has now been in the hospital a week, and with the nourishing diet, rest and freedom from anxiety which he has had here, he has in this short time already improved to a very appreciable extent, as I am given to understand.

As to the matter of dyspnœa it is too much the custom for physicians to tell their patients suffering from cardiac disease that they must be exceedingly careful about taking exercise for fear of evil results; but this kind of advice has a bad effect on such patients. In the first place, it keeps their minds continually on the subject of their hearts, which of itself is very injurious,

and, secondly, it deprives them of that amount of exercise which is essential to the maintenance of health, and which, indeed, as a rule, they could take perfectly well. The safest plan is to direct such patients to take just as much exercise as they can, without inconvenience or discomfort.

In the case of our second patient, whom I now bring before you, we notice on inspection of the chest only one movement instead of two, as in the other, at the apex of the heart, while there is in addition a second movement at the base. The heart is undoubtedly enlarged, because the apex-beat, as you will observe, is considerably lower down than it ought to be. Unlike the former case, it is also found much further to the left than its normal position, a point which leads us to infer the presence of mitral disease. In this respect the first case was an exception to the general rule, the apex-beat being carried so little to the left that it would, perhaps, seem to indicate an aortic rather than a mitral affection. On account of the strength of the impulse in the present instance, we infer that there is hypertrophy rather than dilatation of the heart.

On auscultation we get a systolic murmur at the apex which differs from that in the other case in being less loud, much lower in pitch, and not of such a marked bellows-like character. Again, however, there is no evidence of any mitral obstruction, but when we apply the stethoscope at the base we get with each systole a loud, rough murmur, which must therefore be a direct aortic murmur. But in addition, instead of the second sound of the heart, there is found another rough murmur, so that we have here a systolic and diastolic aortic murmur besides the systolic mitral murmur. The latter is much weaker in tone than the aortic murmurs, but notwithstanding this, it is quite possible that the mitral disease may be more serious than the aortic. The practical lesson to be learned from this is that it is never safe to judge of the gravity of disease of the heart from the intensity and quality of the murmurs heard. I find in this case distinct evidence of dilatation of the aorta (though not

necessarily in the form of a sacculated aneurism) in addition to the cardiac disease. I would warn you, however, never to form a diagnosis of aortic aneurism from the roughness of murmurs heard at the base.

This patient is only twenty-eight, and therefore not of an age which entitles him to have aneurism, which, as a rule, occurs at a later period of life. I am quite sure, however, that there is dilatation of the aorta here, and when this occurs as early as the age of this man it is almost invariably due to one cause, namely, syphilis. This he denies having had, but as he also says that he has never had acute articular rheumatism I am afraid we shall have to place the weight of pathological authority against the word of the patient.

On questioning him, I find that notwithstanding the fact that he has an enlarged heart, with both mitral and aortic lesions, he is able to work hard, and that he manages to get along very well altogether with the exception of a pain in his side sometimes. His heart is really much larger than that of the other patient, but he suffers less inconvenience because the valvular disease is compensated for by predominant hypertrophy, while in the other case the heart has reached the limit of its growth. In the latter the cardiac walls have become more or less thinned, and the predominant dilatation gives rise to greater weakness and interference with respiration.

Our next patient is a Bohemian, who does not speak any English. On inspection and palpation we get two impulses, and find that the one at the apex is not so strong as a second one that is higher up. The apex being lowered and carried considerably to the left in this case also, we have a sufficient basis to warrant the guess that here again there is a mitral lesion. Auscultation reveals the presence of a loud, high-pitched, bellows-like systolic murmur, and there being no presystolic murmur, we form the diagnosis of mitral regurgitation without obstruction, as in the other cases. At the base, the only adventitious sound is an indistinct murmur, which is simply a trans-

mission of that heard at its maximum intensity at the apex. We have again, therefore, a case of mitral insufficiency and enlargement of the heart, and as it is the right ventricle that is principally affected in the latter, the pulmonic second sound ought to be intensified as compared with the aortic second sound. I find, in fact, that the difference between the two is so great that it convinces me that it depends on weakness of the aortic sound as well as the intensifying of the pulmonic, and therefore we are enabled to form some idea of the amount of regurgitation that is here present.

In the last patient whom we have time to examine to-day, I find again the apex lowered and carried considerably to the left. There is, then, cardiac enlargement here also, and from the character of the impulse there can be but little doubt that there is predominant hypertrophy rather than dilatation. The first sound of the heart also indicates this. In hypertrophy the first sound is loud, long, and booming, while in dilatation it is short, weak, and valvular in character. There is once more a mitral systolic or regurgitant murmur, and no direct mitral murmur indicating obstruction. In this case it is quite a feeble murmur, and therefore in marked contrast to that heard in some of the other patients. At the base there is found an aortic direct murmur, loud and rough, and an aortic regurgitant, feeble and soft. In connection with this case, I would again impress upon you the caution of not judging of the gravity of cardiac disease from the intensity of the murmurs present. Twenty years ago, there was connected with the house-staff of this hospital, a young physician who had a well-marked aortic regurgitant murmur, yet ever since then he has continued in the active practice of his profession, and to-day the general state of his health is excellent. If I had time, I could tell you of a large number of similar instances. Although this patient has enlargement of the heart, mitral insufficiency, and both aortic insufficiency and obstruction, I will venture to predict that he will do well, because his system has already tolerated this

cardiac condition for a considerable time, and the symptoms of the case do not now indicate any immediate serious trouble such as we would apprehend if there were present dyspnœa without taking exercise, cyanosis, and general dropsy.—*Prof. Austin Flint, M. D., in Boston Medical and Surgical Journal.*

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, August 7th, 1883.

Present—Drs. Hopkins, Davidson, Long, Eli Long, Hubbell, Ingraham, Heath, Cronyn, Hauenstein, Coakley, Howe, Hayd, Montgomery, Thornton, Brecht, Crego.

In the absence of C. M. Daniels, Secretary, Dr. W. H. Heath acted as Secretary.

After some discussion relative to the mode of election of new members, Dr. Eli H. Long and Dr. Packwood were elected members.

Paper entitled "Medical Education" was read by Dr. Floyd Crego.

Discussion—Dr. Davidson was glad to express his interest and thanks, spoke of the importance of the subject; took exception to the expression of Dr. Crego that "one college" was the exception to defective system existing in all others, and mentioned the fact that the University of Pennsylvania, in face of strong opposition, took a new departure and strong stand for higher education, and was to-day reaping the honor and benefit of it. Of the necessity for a State Medical Board, there should be no difference of opinion; thought it was absolutely idle to look to medical colleges for any improvement. When the American medical colleges met and formed an association, something better was looked for in the way of an advance toward a higher standard; but, as is well known, among the first colleges to withdraw was one of the most prominent in this State, and from

which better action had been expected. Therefore, the profession itself should act and take up the matter, and urge and have a State Board of Medical Examiners appointed, before whom all should appear and pass an examination before being allowed to practice. Its formation and appointment were important considerations. But one point was vital to it, that it should be free from all and every connection with the medical schools; it would be a mistake for any professor of a college to be a member of such board. Dr. Davidson thought it a great credit to the Erie County Medical Society to be one of the first to take the initiative. Owing to the fact that the bill making such law would be strongly opposed, the whole profession should be aroused, and the united action of all legal medical bodies invoked.

Dr. Hopkins had no apology to offer for being interested or speaking on so important a matter. Any one who has the honor and interest of his calling at heart, who feels and considers it a noble profession and not a trade, must certainly feel humiliated at the relations existing between the profession and the people, for it certainly has no hold whatever on the confidence of the public, who consider it largely in the light of a strong sect; was glad Dr. Crego laid the blame upon the profession, where it belonged. Dr. Hopkins referred to the distaste Americans have to submit to regulations, and their high sense of individual liberty. He thought, however, the people were gradually awakening to the importance of educated physicians and an improvement on present systems; referred to the establishment of quarantines, and thought and hoped the time would soon come when they will demand a profession who will scrutinize them as effectually as quarantine now scrutinizes contagious diseases, etc. He thought people should be educated, and thought that educated medical men were a *necessity* to the State.

Dr. Hubbell thought the proposed Medical Board of Examiners should be free from all cliques, and particularly college cliques. It should be broad-minded and avoid sectarianism; did not

think any bill to establish the proposed board would be passed by legislature if at all sectarian in character, and he feared the present bill, as standing, rather inclined that way.

Dr. Hauenstein said it was an admitted fact that higher medical education was a necessity; thought there were so many opinions as to how the result was to be reached, and that there was a great difficulty. If some form could be given the matter it would then be easier to accomplish the object. So long as different members of the profession urge particular views but little can be accomplished. Harmony and unity should be given the matter. Thought the responsibility of the present state and its improvement rested with the profession itself, and not with the laity. It was their duty, and if definite form could be given to it and it was properly agitated, it could soon be accomplished.

Dr. Coakly spoke of the difficulty of obtaining the attention of the legislature, or even a committee. He had had experience in the matter in another State, and found it very discouraging. Found intelligent city representatives willing, but that the rural ones were indifferent, ignorant, and didn't believe in it. He hoped much for the bill in this State.

Dr. Howe spoke of the importance of the subject and regretted that time rendered discussion so superficial and limited, leaving many points untouched. The paper, condensed, referred to three faults:

1st. Physicians who take in illiterate and ignorant students. He would like to hear the experience of the censors in examining many of these men, and what they have to say about it.

2d. The colleges and their abuses, etc.

3d. State Board of Examiners and the want of it, which is so important. Yet, in looking back one hundred years, there was, he thought, a great advance; but a little over that time surgeons and barbers were one.

Dr. H. referred to the peculiar factors at work in this county, notably the absence of strong government to guide us. Referred

to the necessity of teaching physiology in public schools, and educating the rising generation.

Dr. Hayd thought the public felt they were not properly protected. He considered the medical colleges of the United States too mercenary, and that they were established just like factories and glucose works, purely for profit. Referred to short term of two years. Compared the American system with the European and Canadian, to the disparagement of the former. Spoke of State Board of Examiners in Canada, and how they were conducted, and their good results in regulating practice, etc.

Dr. Heath referred to the University of Pennsylvania, which had, some years ago, established a higher standard, graded course, etc. Spoke of over-crowded state of profession in the United States, and stated that there was no other business or profession where so few earned even a living, where competition was so cheap and successful.

As an instance of the poor medical education furnished, said examining boards of United States army, navy and marine hospital services, rejected about eighty per cent. of all applicants.

Called attention to the fact that, without exception, the United States was the only country where medical education was conducted without the principles of preliminary examination, graded and extended course, and examination by disinterested persons. Mentioned the well-known want of confidence in the profession, etc.

Dr. Cronyn wound up the discussion by saying the least the colleges could do was to require a preliminary examination, and extend the course to nine months, at least. Compared the teaching of other professions, law and divinity, where preliminary education is required. Also referred to the resources a skilled medical man should have. Lawyers and clerics could think out and prepare their cases, and take their time to it. With medical men, they had often to have their resources at the fingers' ends, and take action at once to save life and health—no time for reference to authorities, libraries and counsel. Thought, how-

ever, on the whole, that medical men are improving. He lamented that the government did not see the necessity of protecting the health of its people, as well as its property, by legislation, and regulating medical colleges and medical practice. If the medical bill referred to would pass, many causes of complaint will be set aside. Referred, also, to importance of careful technical education, preliminary examinations, long courses, and the great difference between our system and that of foreign and Canadian governments.

A discussion followed between Crego, Howe, Heath and others, as to how recently barbers and surgeons were one.

Dr. Howe presented a rabbit with a cicatrizing corneal ulcer, healing under use of eserine, the active principle of calabar bean ; said that although it was no new thing, having been used in corneal ulcer for six years and more, as yet the exact indications of its use in this very disease were not clear, and it was difficult to decide when to use "atropine" and dilate the pupil, or eserine and contract. In some cases of extensive corneal ulceration, where atropine would seem to be indicated, to get the iris out of the way for prolapsing by dilating, eserine had proved very good by producing the reverse.

Dr. Howe also referred to the power of eserine to reduce inflammation in corneal ulceration, and thought it had somewhat of a specific effect.

Dr. Hubbell spoke of his operations in the use of the drug. Thought atropia better than eserine, which has disappointed him somewhat.

The indications for its use, he thought, were theoretically, at least, clear ; that when the ulcer was towards the periphery of cornea, eserine was indicated to draw the iris away and prevent hernia of it at the point of perforation. If, on the other hand, the ulcer were central and threatened perforation, atropia was indicated to draw the iris away.

As to the specific curative value of eserine in corneal ulcer, he has doubts upon it. In view of large numbers of corneal ulcers, the importance of the subject was apparent.

Prevailing Diseases—Dr. Hopkins: Gastro-intestinal trouble, with peculiar constitutional sympathy preceding the attack. Chill and fever, with temperature $102-104^{\circ}$. and, in twenty-four hours, the evacuations—a condition he had not noticed before. Other members spoke of frequency of dysentery and diarrhoeal troubles and malaria.

W. H. HEATH, M. D., *Secretary pro tem.*

Editorial Correspondence.

BERLIN, August 9, 1883.

Editors Buffalo Medical and Surgical Journal:

Some time since, I wrote to you, promising to send something for the JOURNAL, and, while I have nothing extraordinary to offer, I may yet, perhaps, give a few things which will be of interest as showing what is being done in different parts of Europe in relation to medical matters.

While in Zurich I visited the National Exposition, and found a department devoted to sanitary and medical matters. This division comprised the exhibits of the University of Geneva, some of which were of considerable interest. Among the most interesting was the department of Embryology, in charge of Prof. Fol, with photographs, projected upon glass, of microscopic enlargements. The department of Histology and Physiology, in charge of Prof. Etnod, included about a hundred apparatuses, among which were many intended for the application of electricity and chemical reagents to specimens while under the microscope. Next to these was the laboratory for Comparative Anatomy of Prof. Karl Vogt, with an apparatus for testing the effect of constant movement upon the growth of animals. There was also a considerable number of anatomical preparations, the exhibit of Prof. Laskowski, and likewise a laboratory of Pharmacology, by Prof. J. Brun.

In addition to these there were the usual plans of hospitals, army medical equipments, health and mortality statistics, etc. Apparently great attention is paid, in Switzerland, to the correction of physical deformities. I noticed, in particular, two very complicated apparatuses, one called a Thoracograph, and the other, a Reproduction Apparatus, intended for the purpose of obtaining the outline of the chest and of fitting a perforated sole leather support without the employment of casts of gypsum or other material.

As you doubtless have had many reports in the various journals of the Hygienic Exposition, I shall only notice those things which particularly attracted my attention during a day's sojourn in the various buildings.

The Exposition is devoted to all that pertains to Hygiene and "des Rettungswesens," or life saving. Under these two heads the most unlimited latitude is given to the character of the exhibits. It is oftentimes difficult to imagine what bearing certain exhibits have toward either Hygiene or life saving. Certainly these two terms have been taken in their very broadest interpretation, and nothing which could in any way have any application has been excluded. Necessarily, the exhibition is very comprehensive and apparently is equally complete. The official catalogue is an octavo of nearly three hundred pages. As attracting marked attention may be mentioned the complete Crematorium erected by Siemens of Dresden. Access is obtained in three stories, thus showing the entire machinery, from the upper story, from which the body is lowered to the furnace, to the lower section, intended for the fuel. I may here say, that while at Milan I visited the one at that place. I was informed that over four hundred bodies had been here reduced to ashes, and the large number of receptacles, arranged in rows like the boxes in a post-office, verifies the statement.

Listerism and other disinfecting dressings are represented in all conceivable ways; also, disinfecting washing machines, for clothing and other articles. Of course, there are the usual

number and variety of ventilators and heating apparatuses. But in respect to steam heating, the Americans are undoubtedly still far ahead, as this method of heating is but just beginning to be introduced. The large number and variety of maps and statistics pertaining to health and mortality, in relation to soil, drainage, population and social condition, proves the great importance attached to these conditions in their bearing on public health. Another department to which much attention is apparently devoted is animal vaccination; there are several complete exhibits, showing the methods employed and the results obtained; in one or more the animals themselves are exhibited. In the mining and iron working industries, Knapp the well-known manufacturer of cannons, exhibits fire-proof asbestos clothing. In this department are also a great many varieties of respirators for use in mines and by workers in elevators, etc. The evil influences of the continued use of the treadle of sewing machines seems to have been recognized in the invention of a water motor intended for attachment to an ordinary water pipe faucet. Among the appliances for use at the sick bed, a heat regulator deserves special mention. The purpose is to modify and regulate the local heat of any part of the body, by means of layers of flexible metal tubing folded in various shapes so as to fit the various parts of the body, and through which warm or cold water is allowed to pass. By means of caps for the head extremities, abdomen, etc., the part can be kept at any temperature desired, the whole being connected with a thermometer.

While at Vienna, I visited the anatomical and pathological museums, but these hardly admit of a description, and must be seen to be appreciated. I have also visited the Pathological Institute, in charge of Virchow, with its nearly one hundred thousand specimens. Here, also, are the collection of bones discovered at Troy, by Schiemann, and which were examined and brought here by Virchow. From here, we go to Halle, Leipsic, Heidelberg and again to Paris.

P. W. V. P.

Editorial.

THE COLLEGE AND THE HOSPITAL.

In the last number of the JOURNAL we had occasion to refer to recent changes in the *personnel* of the faculty of the Buffalo Medical College, and also to the controlling influence which that institution exerts in appointments on the medical and surgical staff of the hospital. In what we said, we reflected the current sentiment of the profession in this city in regard to the undue preponderance of college influence in the formation of that staff. If doubt has heretofore existed in the minds of any as to the status of affairs at the hospital, the appointment of the new lecturer on surgery, a young man unknown to the trustees, unknown to the staff by whom he was recommended, and almost unknown to fame, to a vacant position on the surgical staff, simply because the college wished to make use of the hospital for the purposes of clinical instruction for its classes, is amply sufficient to remove it. This appointment, in disregard of the claims of our local surgeons, confirms all we have asserted, that the hospital, is used by the college merely as an appendage to the latter, and to subserve its selfish purposes. Allow us to state, in this connection, that the use of patients for the clinical instruction of students in medicine is not a subject for unfavorable criticism. We simply contend here that the profession of the city should receive deserved recognition in hospital appointments. At the dictation of the college, the trustees have entirely ignored this principle, and have conferred its honors, if such they be termed, upon one who has no claim whatever upon it, except such as is derived through his connection with the college. If the hospital, after showing this disrespect to the profession of the city, expects its co-operation and sympathy in the support and maintenance of that institution, we think it is reckoning on a larger measure of forbearance than human nature is wont to manifest under like circumstances. This action simply indicates that the

hospital authorities care more for the "coterie of medical men" who constitute the faculty of the college than for the entire profession of the city. Let the profession make a note of this. Have they patronage to confer upon an institution which imports, from another city, a surgeon to treat their patients? Have we not local talent equal to all the emergencies that may arise, without sending to Chicago for aid? Not a flattering compliment to our ability when it is announced in the local press that we have not a surgeon "equal to all the varied requirements" of a position in the college, *ergo* not in the hospital.

It is not our custom to notice strictures upon our opinions published in the secular press, but an anonymous writer in one of our city dailies, in a feeble and ill-advised effort to reply to the criticisms in which we indulged on the college and hospital, in our last number, has placed at our disposal so frank a confession of the lamentable failure of the college to fulfill its duty to the profession and to the public that we cannot forbear to notice it. What a commentary upon the reputation and success of a college when it acknowledges, in the public press, that after over forty years of labor in educating men in medical science, "there is no one in Buffalo," not even among its alumni, "equal to the varied requirements" of a position in its faculty. The appeal to the honest opinion of the medical profession of this city, to sustain so glaring an insult to the professional attainments, experience and skill of its members, is the effort of a weak man to hide himself behind the shadow of his neighbors.

In what we have said, we disclaim any discourtesy to the new lecturer on surgery, or any intention to disparage his reputation or ability. While not offering any apology for the strong position we have felt ourselves called upon, in the interests of the profession of this city, to assume, we can only say that inasmuch as he has voluntarily chosen unpopular professional associations, he must bear up under the odium and prejudice to which such associations give rise.

THE NIAGARA UNIVERSITY—THE MEDICAL DEPARTMENT.

Acting under a charter granted by the regents of the University of the State of New York, the trustees of Niagara University have decided to open, at an early day, the department of medicine, in connection with the hospital of the Sisters of Charity, in this city. This movement has been under advisement for several months, and has been brought to a favorable termination through the earnest efforts of the trustees of the above-named institution, who have been actuated by a desire to give a practical response to the general demand, so universally prevailing in the medical profession, for increased opportunities and facilities for the higher education of medical men. The new medical college opens, therefore, under the most favorable auspices, by being connected with the large hospital of the Sisters of Charity, which will furnish ample clinical material for its classes, commodious lecture-rooms, chemical and physiological laboratories, and the most approved facilities for the great work it undertakes to do for the profession. This institution opens its course with requirements which come up to the principles which the JOURNAL has heretofore advocated. It requires its matriculants to furnish evidence of a certain and reasonable standard of literary attainments before entering upon the study of medicine. It lays down a graded curriculum of study patterned after the best medical colleges in this country; it provides for a thorough examination of the student in passing to the higher classes, and finally it submits its candidates for graduation to a Board of Medical Examiners, outside of the faculty, upon whose examination the application for the degree is to be accepted or rejected.

It will be seen that these principles are in the interests of higher medical education. The college, therefore, is not brought into rivalry with other medical schools, simply for the reason that in this vicinity, on account of its high standard of requirements, there is nothing with which it is brought into competition. Its standard of admission, its graded curriculum and its examination for degrees before an independent board

of examiners, place the institution upon a basis which must command the support and approval of the profession in whose interests it will labor.

The following gentlemen compose its faculty:

John Cronyn, M. D., Professor of the Theory and Practice of Medicine.

C. C. F. Gay, M. D., Professor of Operative and Clinical Surgery.

William S. Tremaine, M. D., U. S. A., Professor of the Principles and Practice of Surgery and Clinical Surgery.

Thomas Lothrop, M. D., Professor of Obstetrics.

Augustus R. Davidson, M. D., Professor of Medical Chemistry, Pharmacy and Toxicology.

George E. Fell, M. D., Professor of Physiology and Microscopy.

William H. Heath, M. D., Professor of Anatomy.

Clayton M. Daniels, M. D., Professor of Clinical Surgery, and Adjunct Professor of Surgery.

Henry D. Ingraham, M. D., Professor of Gynecology and Diseases of Children.

Alvin A. Hubbell, M. D., Professor of Ophthalmology, Otology and Laryngology.

Charles G. Stockton, M. D. Professor of Materia Medica and Therapeutics.

Hon. Joseph M. Congdon, Professor of Medical Jurisprudence.

These gentlemen are well and favorably known to the profession and to the public, and their reputation gives assurance that the principles on which the new college is based will be faithfully carried out. The large and prosperous hospital which furnishes accommodations for clinics, lectures, laboratory, etc., gives character and stability to the movement which commends it to our confidence and is a sure augury of success.

We shall refer to this important step in the interests of the higher education of the profession at another time, giving further details of its progress. The new college opens its course October 10, the amphitheatre at the hospital being used for the lecture room, while commodious laboratories have been fitted up for chemical and physiological purposes.

THE HOSPITAL FOR WOMEN.

We notice with pleasure the establishment in this city of a private hospital or sanitarium for women, as we believe the institution will supply a much-needed want. It is a well-known fact that there are many objections to the care of gynecological cases in large public hospitals, and the dangers to patients, and the

obstacles to their recovery, are greatly lessened in smaller and home-like hospitals, which are conducted with peculiar care as to the welfare and comforts of their inmates. From personal observation, we can heartily commend the new hospital.

The building occupied is not only well fitted for its purposes, but is furnished with every comfort for patients, and located in the most desirable part of the city. The charges, too, are extremely moderate, and in view of the advantages it offers in promoting the more speedy and certain restoration to health, it is to be commended to patients even on economic grounds, in preference to the large or general hospital. The well-established reputation of the gentlemen who have organized and placed in working order the gynecological hospital, is a guarantee of good faith and skillful service, and will entitle the institution to the confidence of both the profession and the public. We refer our readers to the advertisement of the Women's Hospital in this number of the JOURNAL for full particulars as to terms, etc.

Reviews.

Anatomy: Descriptive and Surgical. By HENRY GRAY, F. R. S., Fellow of the Royal College of Surgeons, etc. With an introduction on General Anatomy and Development, by T. HOLMES, M. D., Surgeon to St George's Hospital. The drawings are by H. V. CARTER, M. D. A new American, from the tenth English edition, to which is added: Landmarks, Medical and Surgical, by LUTHER HOLDEN, F. R. C. S., with additions by WM. W. KEENE, M. D. Philadelphia: H. C. Lea's Son & Co. 1883.

This new edition of Gray's Anatomy needs only to be announced. There is hardly a physician or even a student in the land who is not familiar with "old Gray." The physician, however, who studied medicine in the "sixties," and who has been so content with Gray's Anatomy of that date as not to have looked into succeeding editions, would open his eyes at the progress of the science as evidenced in this present edition. It is now, indeed, a grand work, containing over 1,000 pages. Many chapters have been entirely rewritten and much new matter and many illustrations have been introduced. Lea's

Son & Co.'s work is always unexceptional; and this work, both as to paper, letter-press and binding, is an instance of perfection of book-making.

A Treatise on the Diseases of the Eye. By J. LOELBERG WELLS, F. R. C. S.
 Edited by CHARLES STEDMAN BULL, A. M., M. D.

The early date at which another edition of this work has appeared is a good indication of the esteem in which it is very properly held. With so many text-books on the same subject it is hard to make invidious comparisons; but with due regard to the thorough work of German authors, it is not too much to say that Wells' work is the best book on the eye, for students and practitioners, that is now available to English readers. The new editions, issued from time to time, during the last fifteen years, have been under such able management as to keep up the standard of worth at first attained. In its present form, we have a practical exposition of the latest views concerning this class of diseases; and much credit is due to Dr. Bull for the careful study of current literature, in order to present an abstract of all that is new and worthy of mention.

A New School Physiology. By RICHARD J. DUNGLISON, A. M., M. D., author of Practitioner's Reference Book. Editor of Dunglison's Medical Dictionary, etc. Illustrated with 117 engravings. Philadelphia: Porter & Coates.

That a knowledge of Physiology is important and desirable for young people to have, is an assertion which no one will dispute. A good text-book for public schools has been needed, and we think that this work of Dr. Dunglison's fairly meets the demand. We have spoken favorably of this work, on its first appearance, and we again commend it.

A History of Tuberculosis, from the time of Sylvius to the present day, being in part a translation, with notes and additions, from the German of Dr. Arnold Spina; containing, also, an account of the researches and discoveries of Dr. Robert Koch and other recent investigators. By ERIC E. SATTLER, M. D. Cincinnati: Robert Clarke & Co. 1883. Price \$1.25.

It is the aim of this volume to supply a history of the study of Tuberculosis, from the earliest times to the present day. The account of the investigations of Koch are peculiarly interesting, and the author has succeeded in presenting the whole subject in an exhaustive and forcible way.

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Original Communications.

APOPLEXY, COMPLICATING CIRRHOSIS OF THE KIDNEYS—EMBOLISM OF THE RIGHT CEREBRAL ARTERY—OBSCURE ABDOMINAL TUMOR.

A CLINICAL LECTURE DELIVERED AT THE PENNSYLVANIA HOSPITAL.

BY JAMES H. HUTCHINSON, M. D.,

One of the Attending Physicians to the Hospital, Physician to the Children's Hospital, Etc.

REPORTED BY WILLIAM H. MORRISON, M. D.

GENTLEMEN—I shall begin the lecture this morning by showing you the specimens removed from the body of a man who was admitted to the hospital on Saturday afternoon last, and who died in the course of twenty-four hours. He was suddenly taken on the street with paralysis and unconsciousness and was brought to the hospital, where an examination of the urine showed that it contained albumen. He was unconscious; there was no marked paralysis; there was no stertorous respiration, and there was albumen in the urine. It therefore seemed a sufficient explanation of the case to suppose that the man was suffering from uræmic coma. The examination of the kidneys after death revealed marked alteration of their structure. I here

show you the kidneys. There is a great diminution of the cortical tissue, while the pyramidal tissue is not particularly affected. In some places the cortical substance is not more than a line in thickness. The surface of the kidney is contracted and presents the appearance which is indicative of the change known as cirrhosis. Looking at the cut section of the organ, you see that the kidney is filled with a large number of little cysts. These are due to the fact that the contraction of the intercellular tissue obstructs the tubules, and their contents, prevented from being excreted, undergo changes and cysts are developed. In the kidney from the other side, the capsule has not been removed and you observe that as I try to take it away I tear off some of the renal tissue. This granular appearance of the organ is due to the contraction of the intercellular tissue which compresses the tubules and greatly interferes with the functions of the kidney.

A further examination of the body revealed that the man was also the subject of apoplexy, a clot being found in the lateral ventricle of the right side. I here show you the clot. As I have said there was in this case no stertor of the respiration, which we should expect to find in a case of apoplexy. It is possible that the hemorrhage came on later. You are all probably aware that in disease of the kidney, especially of the cirrhotic form, there is always more or less alteration in the structure of the arteries, the minute vessels suffering more than the larger ones. They become more friable and more liable to give way, hence apoplexy is by no means an uncommon complication of kidney disease. The absence of stertor, marked paralysis and elevation of temperature and the presence of albumen in the urine led us to diagnose uræmic coma.

There are, I think, some useful lessons to be drawn from this case. This man was going about and therefore apparently not very ill. It is not at all rare for an uræmic seizure to occur suddenly, and it frequently happens that disease of the kidneys exists in those in whom it has never been suspected. I know

of no other disease which is so apt to come on insidiously and finally culminate in death so rapidly as Bright's disease of the kidneys.

I well recollect the case of a woman with a form of skin disease which was in the hospital some years ago. The affection was indeed so slight that it hardly arrested my attention. After being in the house for several days, she was seized with intense dyspnœa, which was so extreme that I could not satisfactorily account for it. Within twenty-four or thirty-six hours she died. At the post mortem, I found both kidneys much reduced in size; one of them did not weigh more than seven drachms. There was no history of kidney trouble and there were no symptoms of such an affection, and the disease for which she was admitted was so slight that the customary examination of the urine was omitted. If this had been attended to, albumen would probably have been found; not certainly, however, for in many instances of cirrhosis of the kidney, albumen is absent from the urine.

Again turning to the specimens, I call attention to a slight enlargement of the heart, which is not an infrequent complication of cirrhotic disease of the kidney. You can, I think, readily understand why there should, under such circumstances, be hypertrophy of the heart. The minute arteries have undergone changes which impose an additional work upon the heart. These arteries, by their contraction, aid in propelling the blood. If they are altered in structure so as to be unable to assist in the circulation of the blood, additional labor is thrown on the heart, which induces hypertrophy. As a secondary effect of the condition of the smaller arteries, we frequently have valvular disease.

The lungs are very dark in color, which may be a result of his occupation. There is no disease of these organs.

In regard to the treatment of such a case, there is very little to be done. Even if we had suspected the existence of apoplexy, it is not at all likely that we should have bled. The only thing

to be done, under such circumstances, is to try to sustain life. There is no indication for medicine. Sometimes in uræmic coma, diuretics and hot baths are employed, but in a person ill as this man was, little could be hoped for from the use of remedies.

EMBOLISM OF THE RIGHT CEREBRAL ARTERY.

I shall next bring before you a patient who presents some points of interest. He has been in the hospital before, and left a short time ago, but he has recently returned, with a new set of symptoms superadded to those which he before presented. This is his history: D. F., age 21; born in Ireland; married; a waiter by occupation. He was admitted on the 19th of the present month (February). The family history is good. He was always healthy until four years ago, when he had an attack of inflammatory rheumatism, lasting for six weeks. This was soon followed by pain in the chest, palpitation of the heart and shortness of breath on exertion. These symptoms continued for two months, and he then noticed that the face began to swell. Shortly afterwards the feet, hands and abdomen also became swollen. He was admitted to the hospital under the care of my colleague, January 8, 1883, with general anasarca and valvular disease of the heart. On the 3d of the present month he left the house a good deal improved. He remained quite well until night before last, February 17th, when he found himself lying on the floor, having fallen out of bed, with the left arm and leg paralyzed, and suffering from severe headache. He denies having had any venereal disease, and there is no history of syphilis. On admission, "the patient was found to be well nourished, has headache, seems dull and restless, the appetite is poor and the bowels constipated. The tongue is slightly coated. There is some œdema of the face, but no swelling of the hands or feet. The left arm and leg are completely paralyzed. There is slight ptosis of the right eyelid. The left side of the face is also paralyzed, and the tongue is protruded to the left side.

Sensation is a good deal impaired in the paralyzed parts." There is also a note in regard to the cardiac disease, to which I shall not at present refer.

We have here a man who, after leaving the hospital, remained quite well until a day or two ago, when he found himself lying on the floor with paralysis of the left side. As he lies here upon his back, you can see that there is paralysis of the left side of the face. When he attempts to protrude the tongue, it is directed toward the left side. There does not seem to be any inability to close the eyelids, but there seems to be a slight ptosis on the right side, *i. e.*, some paralysis of the third nerve of the right side. I am, however, not perfectly sure that such is the case, but the eyelid certainly droops.

Having a paralysis occur in this way in a robust young man, we must, I think, conclude that it is due to one of two causes: either to embolism or to syphilitic disease of the brain. It may, of course, be dependent upon some other disease of the brain, but this is unlikely. The question is to decide between these two conditions. There is the history of early cardiac disease, which was clearly recognized, and there is no admission on the part of the patient of any venereal disease, and there is nothing in the history or in the present symptoms which would indicate any syphilitic trouble. I think, therefore, that there is no doubt as to the nature of the disease. This is a case of embolism of the brain, and the third which you have seen within a few weeks.

So much has been said about the mechanism of this affection that it may seem tiresome to again refer to the subject, but as you are likely to meet with the disease quite frequently, it is important that it should be thoroughly understood. In the other two cases which you have seen, there was mitral constriction and mitral regurgitation. In this boy, in addition to mitral regurgitation, there is also disease of the aortic valves. I think that you can readily understand that if there is an impediment at the mitral orifice, embolism may very easily occur.

In such a condition it is common to have vegetations; and more than this, coagulation of blood in the left auricle is very apt to take place. There is an obstruction to the passage of the blood to the left ventricle, and consequent coagulation of blood in the auricle. I have not unfrequently met with this at post mortem examinations. This clot may become to a certain extent broken up, and a portion be carried into the circulation until it reaches an artery whose calibre it partially or entirely obliterates. It is not necessary that it should completely obstruct the vessel, but only that the embolus should be arrested, for the subsequent coagulation effectually closes the artery.

In this boy the symptoms appear to have come on suddenly and during sleep. This is not at all uncommon. One would be more apt to expect that the clot or vegetation would be detached during active exercise, but this is by no means always the case.

There is one point about this case, and the same thing was true of one of the other patients, and that is, that the paralysis affects the left side. In the greater number of cases, the right side of the body is the part affected in embolism. The reason of this is that the course of the left carotid is a little more direct than that of the right, and consequently the embolism is more apt to pass into the former vessel and obstruct some of its branches, thus giving rise to paralysis of the right side. There is, however, no reason why the right carotid should not occasionally be the seat of embolism.

In regard to the prognosis, this depends to a certain extent upon the size of the artery obliterated. If it is a large one, there is less probability of an entire return of function than if the vessel is a small one; in the latter case, the collateral circulation may be sufficient to take the place of the occluded artery. In both of the other patients who have been before you, there has been great improvement.

We unfortunately do not possess any remedy which is capable of dissolving the clot in the artery. The alkalies seem to be indicated, and if it were safe to give them in such doses as would

produce a solution of the clot, I think that we should probably succeed. They, however, produce such debility that they would do more harm than good. The treatment is expectant. If there is œdema, or other symptom indicating cardiac trouble, we should give digitalis or diuretics, as Basham's mixture. In the present case, there is no particular indication, and I do not see that we can do much more than wait. Iodide of potassium might be prescribed, but it is not likely to have much effect upon the clot.

OBSCURE ABDOMINAL TUMOR.

This case presents some points of interest in reference to the diagnosis. This is his history: "M. W.; age 29; born in Ireland; married; by occupation, a miner; he was admitted February 19, 1883; the family history is good; he had scarlet fever at the age of nine years, and jaundice fifteen years ago; since then he has had good health until six months ago, when he noticed a pain in the stomach which has troubled him ever since; his appetite has failed and he has lost flesh and strength; four weeks ago, while vomiting, he noticed, for the first time, a tumor in the upper part of the abdomen; he has had but two attacks of vomiting, one occurring four and the other two weeks ago; on these occasions the sickness appeared to be due to medicine that he had taken; he has never vomited blood; the pain is sharp and cramp-like, but not constant, being worse when the stomach is empty; he denies any venereal disease and there is no history of syphilis; he has six children living and healthy; he never suffered from malarial poisoning and has never received an injury to the stomach; on admission, he was found to be anæmic, but well nourished; the bowels regular; appetite poor; tongue slightly coated, but moist."

We have had quite a number of cases of abdominal tumors this year, and such cases always present considerable difficulty in the diagnosis. One would suppose that the walls of the abdomen being so thin and apparently presenting no interference

with the examination of a mass within the abdomen, that the diagnosis of abdominal tumors would be among the easiest that we are called upon to make. The fact is that they are among the most difficult. In tumors of the brain we are often able to exactly locate the growth during life. You will recollect that in the case which I showed you a short time ago, the diagnosis of a tumor at a certain portion of the base of the brain which I had made during life, was verified by the post mortem examination. So in diseases of the lung, there is comparatively little difficulty in making out the seat of the disease and also its nature. But in regard to abdominal tumors, I have been at times puzzled to determine their exact nature.

We have here a patient with an abdominal tumor, and I must say that I have not been able to determine its exact seat and nature. I have seen him but once, and as he will probably leave the house in a short time, I have brought him before you, for it is important that you should see not only those cases in which we have been successful in arriving at the diagnosis, but also those in which we have failed.

You can readily see a prominence in the left hypochondriac region. If it remained in this position all the time, we should be apt to conclude that it was due to enlargement of the spleen. It is, however, not always in that position. When first discovered, it was lower down and in the median line. We are able to push it about, and not only so, but movement of the patient's body also causes its displacement. When he turns on the right side, you see that the mass falls to that side. When he sits up, the tumor descends. When I first saw him, the mass was still lower than it is at present. It therefore changes its position very considerably. You will recollect that in the early part of the course I showed you an old colored woman with a tumor which was very movable, but not so movable as is this one. The diagnosis in this case also gave considerable trouble. The disease occurred in a woman over eighty years of age; there had been no symptoms of gastric trouble, yet after death he found a cancerous tumor of the pylorus.

In the present case, it seems almost impossible that this mass should be connected with the stomach. The patient has had no vomiting except on two occasions within the past six weeks, and it was then apparently due to something that had been taken. This is hardly sufficient to make out the diagnosis of cancer of the stomach. This affection occasionally occurs without producing sickness of the stomach, but this is rare. Cancer is also less frequent before middle life than it is after that period.

From the great degree of movement, it seems to be more probable that this is an omental tumor.

You might ask if this mass was not a floating kidney. From the degree of movement and from the fact that the man has been losing flesh and strength, this seems improbable. We have therefore to do with a tumor the exact nature and seat of which we can not exactly determine.

In treating such a case we should do all that is possible to build the patient up. Tonics and good nutrient food should be given. In the way of medicine I do not know of anything more likely to meet the indications better than the iodide of iron. I shall therefore order the syrup of the iodide of iron in half teaspoonful doses, three times a day. If there should be any strumous condition giving rise to this tumor, this would meet the indications.

At the present time it is imposible to speak more positively of the prognosis than we have of the diagnosis. This question can only be settled by time. If the patient should remain in the hospital and give me a further opportunity of studying his case, I shall again bring him before you.

SOME INTERESTING AUTOPSIES.

BY FREDERICK PETERSON, M. D.

(Continued from September Number.)

With regard to these recorded autopsies it is necessary to say that the post mortem examiner has in no case neglected to look at every organ in the body where it was possible to do so. In

the majority of cases at charitable institutions there is no difficulty in doing this; but in obductions at private houses the matter is different. These latter generally add nothing to science, and are made as a rule only in the selfish interests of the attending physician, who is anxious to make or to verify his diagnosis. There is only in exceptional instances profit to the pathologist. The post mortem examiner receives usually neither knowledge nor morbid specimens, nor payment for his services. Furthermore, he runs in every case a dangerous risk. In my humble opinion the attending physician in private cases had better make his autopsies himself; for he will then feel responsibility for no life but his own; he will not feel under such deep and lasting obligation to the post mortem examiner (as he otherwise would), and he can always receive satisfactory corroboration of his diagnosis. Where liberal compensation for valuable services is made, the matter is wholly different. Only very rarely do autopsies at private houses add anything to pathological science.

NO. 33—TYPHOID FEVER.

General Hospital, April 30—Frank B., male, æt. 25; dead thirty-six hours; rigor mortis still present; body well built and fairly nourished; sacral bed-sore 5x5 cm., skin, though still covering it, being gangrenous; over seventh cervical vertebra large excoriation; in two or three places on extremities other such excoriations from pressure.

Head: Membranes normal; brain itself apparently normal; pineal gland had become a cyst considerably larger than a pea, filled with clear colloid fluid, in which the sand grains were easily felt (*vide* Birch-Hirschfeld's *Pathologische Anatomie*, p. 516), ventricles somewhat enlarged, and ependyma hard.

Chest: Left pleura healthy; no adhesions; right pleura had few old adhesions at apex; considerable hypostatic congestion of lungs; purulent bronchitis. Heart very fatty; slight insufficiency of aortic valve through union of two of the lunulæ, and there would have been, also, no doubt, a slight stenosis.

Abdomen: The so-called colloid degeneration of the recti abdominis very well marked in this case, but not found in the adductors of thigh. On examination under microscope, instead of being homogeneous colloid substance as usual, it was granular fatty degeneration; liver fatty in portions; spleen almost double usual size, flabby and pulpy; kidneys enlarged, pale and fatty; some pyelitis; bladder small, contracted, containing purulent urine; surface raw and covered with ecchymoses (acute cystitis). Peyer's patches ulcerated in ileum, all plaques within the space of eighteen inches from valvula Bauhini; also small ulcerations of solitary glands; these ulcers in many places covered with dark blood coagula; faecal matter yellow; no perforation; no peritonitis.

Diagnosis: Cause of death, asthenia from typhoid fever, which led to ileal ulcers, fatty degeneration of heart, liver, kidneys and recti abdominis, pyelitis, cystitis and splenitis.

Remarks: The tumor of the pineal gland was rare. In this case it had led to no nervous disturbance. In most recti abdominis of typhoid fever which I have examined, where there has been any degeneration at all, it has been colloid. This is the first in which I have found it fatty degeneration, although it has been recorded before in a few instances.

NO. 34—KYPHOSIS AND AMYLOID DEGENERATION OF SPLEEN, LIVER,
KIDNEYS AND INTESTINES.

Patient of Dr. Storck, May 2—Burkhardt, male, æt. 9; dead twenty-six hours; body emaciated; knees and thighs flexed and inextensible; angular curvature of spine backward at about last dorsal and first lumbar vertebra; old scars in groin from former psoas abscesses; large fistula over sacrum, through which pus poured freely.

Head not examined.

Chest: In each pleural cavity about 150 ccm. of sanguinous serum; lungs normal; heart normal.

Abdomen: Spleen enlarged, hard, amyloid. Liver enlarged, softer than spleen, both fatty and amyloid. Both kidneys very large, pale and amyloid; posterior surface of right kidney formed part of wall of a psoas abscess, which extended down to ilium and into sacral region. Bodies of first sacral and fifth lumbar vertebræ almost wholly gone, and second and third lumbar also softened. Intestines very pale and amyloid. Stomach normal. Bladder normal.

Diagnosis: Spinal caries, causing kyphosis and abscess formation. The long-continued suppuration led to the extensive amyloid degeneration of abdominal viscera described.

Remarks: The cause of the caries was a fall from a height five years before.

NO. 35—MEDULLARY SARCOMA OF PITUITARY BODY.

General Hospital, May 3—Geo. S. Jones, æt. 48; dead six hours; no rigor mortis; body well developed, well formed and well nourished; panniculus adiposus remarkably thick.

Head: Brachycephalic. Opacity of pia mater and arachnoid from chronic inflammation; dura mater normal. More than usual quantity of fluid in arachnoid cavity. Where the pituitary body should be was a very soft, pinkish, encapsuled tumor some 5 cm. in diameter, pressing into the brain in front of the pons varolii, compressing the optic commissure, and going deep into the sphenoid bone, having eroded its way into the sphenoidal sinuses. Brain substance around it apparently normal, and the rest of brain substance normal. Under the microscope the suspicious tissue was found to consist of innumerable round cells, of size of white blood corpuscles, lying in alveoli of what appeared to be lymph vessels. Ventricles were very wide, distended with clear serum; ependyma hard; cysts in both choroid plexus.

Chest: Costal cartilages ossified. A few old pleuritic adhesions; subpleural ecchymoses. Lungs very oedematous, otherwise normal. Heart fatty degenerated; valves normal;

subpericardial ecchymoses; agonia clot in right heart (he was long in dying, by asphyxia); beginning atheroma in aorta.

Abdomen: Spleen small, firm in consistence. Liver fatty. Both kidneys somewhat fatty. Bladder distended with urine. Submucosal ecchymoses in stomach and ileum.

Diagnosis: Primary medullary sarcoma of pituitary body, followed by chronic meningitis and chronic hydrocephalus internus. Fatty degeneration of heart, liver and kidneys as result of general nutritive disturbance.

Remarks: Three years ago this patient began to complain of his eyes failing him. Two years ago his eyes grew worse and he was subject to severe headaches. He had, besides, periods of blindness. His pupils were often much dilated, and often contracted, and always insensitive to light. Up to three days before his death was perfectly intelligent and conscious. The pressure of the tumor upon the optic commissure easily explains the foregoing symptoms. In the last three days he became delirious, then comatose and died. As may be supposed tumors of the pituitaria are exceedingly rare. Disease of this body was once looked upon as a cause of epilepsy—an exploded theory. Colloid degeneration, miliary tubercles and syphilitic gummata have been found in it. Only a few cases of soft sarcoma of the pituitaria are on record.

NO. 36—ACUTE PRIMARY CARCINOSIS OF LIVER WITH METASTASES
IN LUNGS.

Patient of Dr. Bartlett, May 6—Ann Boyne, æt. 44; dead twenty-four hours; body well formed, well nourished, of jaundiced color.

Head not examined.

Chest: One litre of dark bloody serum in right pleural sac; one-half litre in left. Right lung much compressed by elevation of diaphragm; both lungs filled with millet seed growths exactly as in subacute tuberculosis, but here and there soft malignant looking nodules of size of hazel nut. Heart atrophied, myocardium fatty, valves normal.

Abdomen: Spleen normal in every way. Liver enormously enlarged, weighing eleven pounds, and full of innumerable, soft, white medullary nodules, proved by subsequent microscopic examination to be carcinoma. Besides these, countless hæmatomata existed in the liver, some of which were 5-8 cm. in diameter, evidently formed by ruptured blood vessels in and about the soft cancerous deposits. The gall-bladder was small but not connected with any malignant growth. Pancreas normal in every respect. Both kidneys fatty degenerated, but not abnormal in other respects. Both ovaries and uterus normal. Bladder distended with urine, but normal. Stomach contracted and very small, but normal. Ileum, duodenum, rectum and œsophagus normal.

Diagnosis: Acute primary carcinosis of liver with secondary miliary growths in both lungs. Fatty degeneration of heart and kidneys from general nutritive disturbance.

Remarks: The woman had been ill but six weeks. Previous to that was healthy and at work. In the family a trace of tuberculosis, but no history of carcinoma or other malignant growth. Such cases are by no means common. According to a verbal statement of von Recklinghausen, with an average of five autopsies daily, he finds but one case of primary carcinoma of the liver every three years. Primary carcinoma of the gall bladder is more common.

NO. 37—SACCULATED ANEURISM OF AORTA ASCENDENS.

General Hospital, May 9—Geo. Holland, æt. 55, soldier; dead nine hours; body emaciated; soft and yielding tumor 15 cm. in diameter over right mammary region.

Head: Venous vessels of brain much engorged. Brain itself normal. No atheromatous disease of basilar arteries.

Chest: Œdema of muscular and subcutaneous tissues of thorax. In left pleural cavity nearly a litre of serum. Left lung normal. Pericardium everywhere adherent to heart by connective tissue and gelatinous masses. Heart itself slightly

enlarged and somewhat fatty; left ventricle moderately hypertrophied; no valvular lesions; in aorta no atheromatous disease apparent. From aorta ascendens to the right was a large opening capable of admitting four finger breadths; this led into a cavity, bounded by a sac and thrombic layers, large enough to hold the fist; this sac was full of soft recent clots of blood, and protruded near the sternum between the second and third ribs to the distance of 5 cm. beyond the thorax; these two ribs were crowded apart and eroded, the second on its lower border, the third on its upper, so that these ribs were there but 5 mm. in width; on the left side of this part of the sac, external to the thorax, was an opening which would pass a finger, where rupture had evidently occurred some time previously; through this the blood had gushed out into the tissues, forming, external to the thorax, a diffuse arterial hæmatoma around the true aneurism, so that this extra-thoracic tumor, a few days before death, measured 25 cm. in diameter (this, of course, was less post mortem because of the rupture internally); the aneurism itself had made its way behind and to the right into the greater part of the middle and lower lobes of the right lung, and there the tumor protruded from the thorax; the pleural surfaces had grown fast together; there was no evidence of pleurisy elsewhere; at the lowest part of the lung was a small tear in the aneurismal sac, $2\frac{1}{2}$ cm. in length, opening into the pleural cavity; the pleural cavity contained fully two litres of recent blood coagula, with a little serum. The fatal rupture had taken place here the day before. Between the third and fourth ribs was also a large space, the fourth being pressed downwards and much eroded. The *arca aortæ* and aorta descendens normal.

Abdomen: Spleen normal. Liver fatty. Kidneys, stomach ileum and bladder normal. Small quantity of serum in abdominal cavity.

Diagnosis: Sacculated aneurism of aorta ascendens. Rupture of this caused death.

Remarks: For some time a proper history of the case could not be elicited from the patient, hence he was the object of great interest to a number of the physicians of the city, and the diagnoses varied considerably. There was, however, no difficulty in making a proper diagnosis, as soon as it was learned that the patient had for years had a pulsating tumor of small size in the right mammary region, which suddenly, within a few months, began to enlarge swiftly. His sudden death was also corroborative. Through the kindly assistance and advice of a dozen or more of the physicians present at the autopsy I was enabled to remove the specimen entire, and it is preserved in the college museum.

NO. 42—ANOTHER SACCULATED AORTIC ANEURISM.

Patient of Dr. Rochester, May 23d — Zhach, male, æt. 39; dead twenty-seven hours. Body extremely emaciated.

Head not examined.

Chest: Right lung normal; no adhesions; left lung everywhere firmly attached to the thorax; upon cutting into it, found it filled with innumerable large and small abscesses, from size of pea to that of hazel nut and larger; bronchial tubes also full of pus; no tubercles. Pericardium contained over one litre of serum full of lymph flocculi; both parietal and visceral pericardium covered with rough, villous fibrin. Heart and valves normal. Atheromatous disease of aorta in first stages. At juncture of descending aorta and arch an opening large enough to admit a finger into an aneurism twelve cm. in diameter. This tumor had eroded the bodies of the seventh cervical and first and second dorsal vertebræ, their left transverse processes, and also part of corresponding left ribs. The rest of the thoracic and the abdominal aorta normal.

Abdomen: Spleen slightly enlarged and hard. Liver engorged. Both kidneys somewhat atrophied, fatty, and contained a few scars of old cysts.

Diagnosis: Sacculated aortic aneurism. This caused suppurative pneumonia of left lung and pericarditis with effusior. Death from asthenia.

NO. 62—NON-SACCULATED ANEURISM OF AORTA DESCENDENS.

Sisters of Charity Hospital, Aug. 24—Michael Delaney, æt. 47; dead eighteen hours; body well nourished; very marked rigor mortis; blood oozing from mouth.

Head not examined.

Chest: A few old adhesions of right lung; left adherent to ribs behind; some œdema of right apex, and hypostatic congestion of lowest lobe. Pericardium very thin with old pericarditis flecks on visceral portion. Heart enlarged and fatty; no blood whatever in heart or venæ cavæ; aortic valves somewhat thickened; aortic arch dilated and atheromatous; an aneurism 12 cm. in diameter of descending aorta, just behind heart; this was an aneurismal dilation of the vessel or a non-sacculated aneurism; it was full of coagula; behind it had eroded a great part of the bodies of three or four dorsal vertebræ, and had pushed into the left lung until its sac touched the ribs behind; there were numerous small abscesses in the lung close to the aneurismal sac; the œsophagus was full of dark blood coagula, and there was a small opening large enough to pass a lead pencil in its posterior wall where the aneurism had ruptured; there was some infiltration of subpleural cellular tissue with blood.

Abdomen: Stomach enormously dilated, extending to umbilicus, containing one large coagulum of blood accurately moulded to its shape; blood also in duodenum. Spleen enlarged and soft. Liver small and very fatty. Both kidneys fatty, containing a few cysts each, atrophied and granular. Lime plates in aorta at iliac bifurcation.

Diagnosis: Aneurismal dilation of aorta descendens. Rupture into œsophagus the immediate cause of death. General

endarteritis deformans was the cause of the aneurism. Chronic interstitial nephritis.

NO. 17—INTERNAL HEMORRHAGE FROM RUPTURE OF A SMALL ARTERY IN ENDARTERITIS DEFORMANS.

Patient of Dr. Burwell, Jan. 20—Mrs. S., æt. 68; dead twenty hours; body very well nourished; rigor mortis still present.

Brain not examined.

Chest not examined.

Abdomen: In abdominal cavity some 200 ccm. of blood coagula. Spleen small, elongated, black and hard, and vena lienalis very large. Peculiar soft blotches on mesentery not elevated, neither tubercular nor cancerous. Liver atrophied and exceedingly fatty, and had two rib marks from corset atrophy. Omentum and mesentery very fat. About eighty gall stones of cholesterin and bile pigment, size of pepper grains, in gall-bladder. In stomach great capillary congestion, even ecchymoses, but no mucus. Intestines normal; no peritonitis. Great fatty degeneration and atheroma of arteries, in some places atheromatous ulcers and extravasations into media. Kidneys: pyelitis, and granular atrophy, with cysts. Bladder, uterus and ovaries normal. The point of bleeding was in one of the smaller branches of the splenic artery.

Diagnosis: Cause of death, rupture of some branch of splenic artery, with hemorrhage into peritoneal cavity and death from shock. Chronic interstitial nephritis.

Remarks: The woman died suddenly with collapse. The general atheromatous disease of the arteries had so weakened the walls of those vessels that they were ready, at any slight increase in blood pressure, or by any sudden turn of the body, to burst. The following case is so similar that I place the two in juxtaposition for comparison.

NO. 21—ABDOMINAL HEMORRHAGE. ATHEROMATOUS DISEASE OF ARTERIES.

Patient of Dr. Harrington, Feb. 6—Mr. S., æt. 53; dead fourteen hours. Body well nourished.

Head not examined.

Chest: A few subpleural ecchymoses. Lungs both normal. Heart and valves normal. No atheromatous disease in thoracic aorta.

Abdomen: Fully four litres of blood in the peritoneal cavity. Spleen slightly atrophied. Liver also small and fatty. Kidneys small but normal. A slightly marked chronic gastritis. Rupture of one of the smallest pancreatic branches of the splenic artery. There was general atheromatous disease of the abdominal aorta and its branches, in many places large calcareous plates in the vascular walls.

Diagnosis: Death from shock caused by hemorrhage into abdominal cavity, from rupture of an atheromatous artery.

Remarks: It is generally stated in works on pathological anatomy that the arch of the aorta is most usually affected when atheromatous disease exists at all. In this case it was only to be found in the abdominal aorta. I would not mention this if I had not found it to be a fact, in at least twenty cases, that where any atheromatous disease exists it is certain to be at the bifurcation of the iliacs, although the thoracic aorta may not be affected at all, or to a very slight extent.

(To be continued in next number of the Journal.)

CONCERNING THE JEQUIRITI TREATMENT OF GRANULAR LIDS.

BY LUCIEN HOWE, M. D.

Although the use of jequiriti or *abrus precatorius*, is comparatively new, enough has already been written concerning it to make its effects familiar even to those not especially interested in ophthalmological literature.

It will be remembered that it was recommended by DeWecker for the treatment of granular lids, especially those complicated with pannus. An infusion of the bean, when applied to the conjunctiva, was found to produce a severe inflammation of a diphtheritic nature, but when this subsided, it left the cornea

clearer than before, and the granulations much smaller, if, indeed, they had not entirely disappeared. It had been known for a long time that the conjunctiva could be inoculated in a similar manner with gonorrhœal pus, and sometimes a favorable result obtained, but unfortunately the degree of inflammation could not be regulated, and frequently, instead of improving the original condition, the eye was thereby lost.

It was, therefore, a valuable discovery, when an agent was found to have all the advantages of that method of treatment, but free from most, if not all of its dangers. The usual tendency is always to over-estimate the efficacy of a new drug, but the results thus far obtained place one important fact beyond doubt, this is, that jequiriti is among the best agents at our command for treating certain aggravated forms of granular conjunctivitis, in selected cases even ranking above copper sulphate or silver nitrate. The clinical observations in support of this statement are already too numerous to warrant any account being given here of the ordinary experience with the drug. It may simply be remarked that I have thus far given the drug a fair trial in nine cases. Three of these were more improved by its use in about sixteen days than by application of sulphate of copper for nearly two months. In two, the improvement was also very decided, but it was necessary to induce the peculiar inflammation a second or third time. In two, it did absolutely no good. Finally, two others remain still under treatment, one of which is improving, and the other with no prospect of it. Or, to recapitulate: the results in three cases may be called very successful; in two, moderately good; in two, a complete failure, and in two, doubtful. I am aware that the data furnished by so few cases are not sufficient from which to draw any valuable conclusions as to the general plan of treatment, but the observations thus far made are certainly sufficient to warrant my calling attention to one or two facts regarding the use of the bean which writers have barely mentioned or entirely ignored.

The first of these relates to the freshness of the bean. Wecker laid some stress upon this point in one of his first articles, and attributed the failure of the treatment in the hands of others as perhaps due to their using old or dried beans. The importance of the observation is at least substantiated by my experience with the drug. The first beans which I used were obtained in June last, from Boston. An infusion of these, of two and one-half per cent., gave absolutely no results. One of five per cent. produced a moderate conjunctivitis, and finally a solution twice as strong was necessary to cause the effects usually described. Moreover, this occurred in only two eyes, out of the four on which it was then tried. Had I rested at that point and ventured to draw conclusions, they would have been rather unfavorable to the drug. Fortunately, however, I sent to another dealer, Mr. Fingerhut, of Fourth Avenue, New York, paying him rather a large price for a very small package of the beans. These were a brighter red than the first, but otherwise quite the same, to all appearances. On trying a two and one-half per cent. infusion on one of the eyes, which before was unaffected, I found the characteristic inflammation made its appearance before the third day, and an infusion twice as strong was sufficient to bring out the typical diphtheritic deposit and swelling of lids and face. This was produced in each of the four cases already mentioned, and still a fifth, subjected to the treatment for the first time. Of these five, two then complained, in addition, of very decided vertigo, and one was not only confined to her bed in the hospital for two days, but also had hallucinations similar to those which occasionally accompany the use of an opiate. The difference in the action of these two specimens of the drug is sufficient to warrant some care in its selection.

A second point to which I would call attention is the diminishing effect of the same infusion, when used for a length of time. I noticed this particularly when experimenting with jequiriti on the eyes of rabbits. For example, a two and one-half or five per cent. solution, even of the stale beans, would set up

a conjunctivitis (but not of diphtheritic nature), which would reach a maximum degree about the end of the second or beginning of the third day, and gradually subside, in spite of the continuance of the applications, although it would not entirely disappear. If a fresh infusion of the same beans was then used, more acute symptoms would again supervene. The same variations I have witnessed in the human subject. I am frank to say that usually, when the degree of inflammation has been very severe, I dared not continue the jequiriti simply to determine how much the eye would still tolerate. In the case of an old man, however, with a very thick pannus, and granulations of several years' standing, I used a five per cent. solution, till the diphtheritic deposit, pain and swelling, was produced; but these symptoms gradually subsided, and in the course of two weeks almost entirely disappeared, although applications were continued three times a day.

The natural inference from this is, that the infusion deteriorates quite rapidly, and although I am told that at one large Infirmary in this country, only fresh infusions are used, still I do not think this fact has received the attention in the literature, which its importance demands.*

The third point to which I would call attention is the effect of jequiriti infusion upon the cornea. DeWecker insists that this structure is not endangered by its use, and I am only aware of one writer who has allowed this statement to pass unchallenged. My experience, however, would lead me to think that the cornea is by no means free from danger by this method of treatment. In two cases I have seen an ulcer form even when the degree of inflammation otherwise was not in a very great degree. As soon as the applications were withheld, and atropine used, the healing of the ulcers soon began, but without doubt they were due to the jequiriti treatment.

Although such ulcerations may be small and superficial, and although they may be rare, still, one such observation is sufficient

* *Annales D'Oculistique* Mai-Juin, 1883, page 218.

to make the surgeon cautious in receiving the statement that "the cornea runs no risk during the development of jequiriti ophthalmia."

These three facts concerning the use of the drug seem to be of so much importance as to be worthy of special attention by those who avail themselves of its undoubted advantages.

Clinical Reports.

BUFFALO GENERAL HOSPITAL—SURGICAL CASES TREATED.

By CHARLES C. F. GAY, M. D., Attending Surgeon.

SHOT WOUND OF THE RIGHT EYE—EXTIRPATION OF THE GLOBE— BALL FOUND TO HAVE PENETRATED THE LOWER FLOOR OF THE ORBIT AND LODGED IN ANTRUM—RECOVERY.

Mrs. Magee, æt. 25 years, was shot by her husband with a Smith and Wesson pistol, on March 3, 1883, the ball of which—a No. 22 calibre—penetrated the center of the globe of the right eye. She was removed to hospital, and on March 4th, I enucleated the eye and found the ball had taken a downward course, penetrating the lower floor of the orbit, and which was undoubtedly lodged in the antrum. Water dressings were applied and good recovery was made, and as yet no trouble has been experienced from the lodgement of a foreign body in the antrum.

SHOT WOUND OF THE LEFT EYE—EXTIRPATION OF THE GLOBE OF THE EYE—BALL LODGED ON THE FLOOR OF THE ORBIT, AND REMOVED.

Mr. Magee, æt. 28 years, after shooting his wife, shot himself, the ball penetrating the globe of the eye near its center. The eye was extirpated and the ball, flattened, was found at the near and inner angle of the floor of the orbit, and removed.

Patient made a good recovery.

TRACHEOTOMY.

Miss Emma Kennedy, æt. 23 years, member of the hospital school for nurses, had been out of the institution a few days nursing two or three children ill with a malignant type of diphtheria. She returned to the hospital feeling ill, complaining of sore throat, etc. Active treatment was at once resorted to. After four days' illness her respiration, of a sudden, became so much obstructed by diphtheritic deposit, that her face became livid, eyes rolled upward, frothing at mouth, pulseless, unconscious, insensible, and presenting the appearance of one gasping for the last time.

Summoned by Dr. Diehl, I reached her bedside in a moment or two, and although the case seemed hopeless and an operation needless, still it was rapidly made, and there being no tracheal tube at hand when the tracheal incision was made, an ordinary silver male catheter was inserted and answered the purpose most admirably. The catheter was held in position until a tracheal tube was obtained; upon inserting the former much mucus, with some membrane, was thrown violently out, and the breathing at once became full, free and easy; the patient's consciousness, color and pulse returned. She remained very comfortable for two days, giving occasional encouragement of ultimate recovery, but at length succumbed to the malignant type of the disease, with consciousness maintained up to within a half hour of her death.

COMPOUND DEPRESSED FRACTURE—RIGHT PARIETAL AND TEMPORAL BONES—TREPHINING—DEATH IN FORTY-EIGHT HOURS.

Mr. Strausser, æt. 32 years, fell through the hatchway from the second floor of a malt house to the basement, striking on his head.

Entered hospital on March 4, 1883. I saw him within an hour after injury; patient was etherized; a flap laid back revealed the extent of fracture, which was v-shaped, the apex toward the vertex, and depressed. The trephine was employed, a but-

ton of bone removed and the depressed fragment of the parietal bone elevated. A piece of the right temporal bone, measuring three-quarters of an inch in diameter, was removed by the rongeur. Patient vomited much blood, and percussion revealed presence of blood in left pleural cavity. Death occurred in forty-eight hours.

COMPOUND COMMINUTED FRACTURE OF TIBIA.

Wm. Auer, æt. 40 years; German; single; shoemaker; was injured on April 1, 1883. The wheel of a hand-car passed over his right leg. The tibia is fractured near the knee, and also near the ankle, with a small flesh wound. The limb is much swollen, discolored, and looks unpromising for recovery. He entered hospital April 21st. At first, amputation seemed to afford the only surgical resource, but the limb was placed upon a bran pillow in the fracture box, alcohol lotion one-third to two-thirds carbolized water employed, and the limb enveloped in oil silk. Improvement was steady under this treatment. May 19th, there is union of bone. The Bavarian splint has been used for the past three days in place of the fracture box. 26th, one side-splint employed only.

June 23d—Patient has been up but cannot remain up. There is delayed union at the upper third of tibia. Applied to-day plaster of Paris splint from foot to above the knee.

This patient recovered with a good limb.

COMPOUND COMMINUTED FRACTURE OF THE UPPER PORTION OF
RIGHT TIBIA—AMPUTATION ABOVE THE KNEE—DEATH.

Dennis Sullivan, æt. 30 years; temperate; single; Ireland; was injured at 12 o'clock, May 18, 1883, by being caught between bumpers on Nickel Plate road, and brought to hospital at 4 P. M. Fracture is high up toward knee; two flesh wounds; there has been much loss of blood, and blood still oozes when compression is removed; pulse feeble.

Patient was etherized, after giving a large dose of brandy, with twenty drops of laudanum. Esmarch's bandage was em-

ployed, and assisted by Dr. Putnam, house physician, I amputated the thigh at the lower fourth. Three arteries required ligation. Wound was dressed with boro-glyceride, over which was placed Mackintosh's covering and roller bandage. Operation was done with antiseptic precautions, which were carried out in all their details.

But a few drops of blood were lost at the amputation. Examination of the bones showed that the tibia was broken into thirteen pieces; the fibula was not broken.

19th—Pulse 112; temperature 101°.

20th—Doing well.

On the fifth day after the amputation, I was surprised to learn that the patient was dead; cause supposed to be from exhaustion. I am unable to assign a cause, unless it may be the loss of a large quantity of blood previous to his entry to hospital; but granted that much blood had been lost, still, the fact remains that the patient, on the fourth day after the amputation, was in an apparent good condition, and without any symptom or symptoms that could possibly lead one to suspect a fatal result.

COMPOUND COMMINUTED FRACTURE OF TIBIA—AMPUTATION OF THIGH—RECOVERY.

Simon Curley, æt. 18 years, trying to board an Eric freight car, fell, and the wheel passed over his left leg, causing a large flesh wound well up toward the knee-joint, splitting and comminuting the tibia. Three small fragments of bone were removed. He was brought to hospital same day of injury at 4 P. M., May 20, 1883. Pulse feeble; face pallid. Stimulants were administered. I proceeded at once to amputate, assisted by Dr. Putnam, house physician. Ether and Esmarch's bandage were employed. Amputation was made at lower fourth of femur. Ligature placed around four arteries; no blood lost during or after operation. Patient almost pulseless. Brandy and ether injected freely hypodermically during the operation.

Antiseptic precautions were employed, with boro-glyceride dressings. Vomited after getting to bed. Both arms were bandaged in order to furnish head and heart with more blood. Hot brandy and laudanum were administered as soon as the stomach could retain them. At 9 A. M. the following morning the patient was in a good condition. Examination of bones showed fibula unfractured, tibia comminuted into five pieces, with long longitudinal fracture extending well up to knee.

May 27th—Wound looks and smells bad. Patient has had specific disease. Ordered iodides of mercury and potassa. Pulse 120; temperature $100\frac{3}{4}^{\circ}$. Quinine and laudanum. Iodides used about one week. Wound improved after their use. Wound closed up July 24th, and patient returned to his home soon thereafter.

COMPOUND COMMINUTED FRACTURE OF TIBIA AND FIBULA—RE-
SECTION OF ENDS OF BOTH BONES—TIBIA WIRED TOGETHER
—GOOD RESULT OF CONSERVATIVE SURGERY.

Reported by Dr. Webster, House Surgeon.

James Hallum, æt. 67 years; entered hospital June 5, 1883, with compound comminuted fracture of both bones of the right leg, with extensive flesh wound; says it was caused three days ago by the falling of a large stone upon it while he was engaged in excavating for a railroad. He says six fragments of bone were removed when the wound was first dressed by the local surgeon. Cold water dressings had been applied before the patient entered hospital. Here the wound was thoroughly irrigated and the limb suspended in a tin trough; two days later patient was removed from the ward to a tent on the lawn, the leg placed in fracture box, and dressings of alcohol, one-third part, and carbolic acid one-fortieth, two-thirds applied. Pulse and temperature nearly normal after first day in tent.

June 15th—The ends of both tibia and fibula were resected by Dr. Gay, and ten fragments of bone removed. Ends of tibia drilled and wired together with silver wire; counter-

opening made upon opposite side of leg and drainage tube passed through; iodoform applied to wound; wound irrigated thoroughly and entire drainage changed each morning; alcohol and carbolic cloths changed as often as they became dry; simple cerate over wound itself; the operation was followed by slight rise in temperature for three or four days, when it again subsided to near the normal, 99-100°.

June 20th—Patient in good spirits; temperature 99° in morning; pulse 88; wound healthy and granulations well marked over nearly the entire surface; new skin closing in from below.

July 13th—Wound closed over bone; silver wire removed a week since; small pieces of bone have exfoliated; put limb in fracture box and laid upon bran bag.

August 20th—Closure of wound and firm body union; shortening of limb two and a half inches; patient able to be up.

COMPOUND COMMINUTED FRACTURE OF TARSUS—AMPUTATION.

Reported by Dr. Webster, House Surgeon.

C. Leiber, æt 37 years, German; entered hospital June 6, 1883; patient has a crushed right foot, over which has passed a car wheel, laying open the tarsus to the depth of two inches on the external side; circulation in foot and toes good. Boro-glyceride dressing was applied and foot strapped so as to adjust the parts as nearly as possible.

June 9th—Temperature went up to 104½°; foot and leg cedematous; boro-glyceride discontinued and poultices to leg and foot ordered, to be changed or renewed every four hours.

June 10th. Large abscess opened on ankle and three-fourths ounces of pus removed; counter-opening made and drainage tube passed through.

June 12th—Abscess in instep opened and drainage tube introduced; poultice and strapping continued; temperature reduced to 101°, at night after abscesses were opened; leg infiltrated considerably.

June 18th—Leg amputated at middle third by Dr. Gay; drainage tube passed from one angle of wound to the other; flaps united by three silk sutures and adhesive straps between the sutures; patient immediately removed to tent and wound treated antiseptically with boro-glyceride dressings; temperature for the following week 99° , in morning; $100-101^{\circ}$, at night; pulse at night, 90.

June 22d—Drainage tube removed; slight purulent discharge from angle; flaps apparently united; patient sat up three hours this morning, being the fourth day after the amputation.

June 25th—Doing well, no change unless for the better; pulse, 76; temperature, $100\frac{3}{4}^{\circ}$ at night.

July 13th—Flaps firmly united; patient up and about on crutches; rapid convalescence has been owing, probably, to tent life or out-door air.

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, September 4th, 1883.

President, Dr. J. Cronyn, in the Chair. Dr. C. M. Daniels, Secretary.

Present—Drs. Mann, Hopkins, Peterson, Howe, Frank, Weil, MacNeil, Hayd, Bartlett, Hubbell, Abbott, Brecht, Hartwig, Tremaine, Fowler, Heath, Cary, Fell, and, by invitation, Drs. Park and Southwick.

Upon motion, Dr. Park was invited to participate in the meeting.

Dr. Howe called the attention of the society to the treatment of granular lids with infusions of *abrus precatorius*, or, as it is commonly called, *jequiriti*. He referred to a former method sometimes adopted, of inoculating these cases with gonorrhœal pus, which occasionally improved the condition of the eye, but

in many instances also destroyed it. The jequiriti produced an inflammation similar to that caused by the pus, but fortunately, its degree could be controlled at will; a decided advantage was thus gained, and for certain cases, this new remedy seems to be full of promise. It is probably not adapted to all varieties of granular conjunctivitis, but principally to those in which the secondary corneal complication (pannus) is in a great degree as compared with the conjunctivitis itself. In illustration of these remarks, a patient was presented, a young man whose left eye was entirely blind from a thick pannus, in spite of the fact that sulphate of copper, nitrate of silver and other ordinary applications had been faithfully used a long while. Such cases can still hope for at least some relief by the jequiriti treatment.

Essay by Dr. H. E. Hayd; subject, "Club-foot." (The paper will appear in the next number of the JOURNAL.)

Discussion—Dr. Park stated that he had been especially interested, and thought the points well taken.

Dr. Bartlett thought that Dr. Hayd justly complained of the great expense of the various mechanical appliances used, and thought they might be simplified and cheaper. Had himself used tin shoes and adjustments where patients were poor.

Dr. Frank asked up to what time an operation was advisable.

Dr. Hartwig thought the essayist had clearly explained the conditions, although some joint relations had not been observed; yet, as a whole, the paper presents a clear and forcible argument.

Dr. Cronyn, in referring to the primary cause and theory advanced by Dr. Hayd, said it was a subject that had occupied much attention from many men. He considered the hypothesis of deformity as yet very uncertain, and that there was room for any amount of investigation upon the subject.

Dr. Hayd said he tried to make the paper as practical as possible in order to excite discussion. In reply to Dr. Frank's question, he thought age should not interfere, but to operate as

soon as possible. As to the theories advanced, they were entirely his own.

Discussion upon the action of "jequiriti," as explained by Dr. Howe, followed.

Dr. Tremaine asked if *similia similibus curantur* was not proven by its action?

Dr. Bartlett had heard of the intentional inoculation of gonorrhœal virus in certain forms of ophthalmia, and asked if such had been done, and with what result.

Dr. Abbott stated that it had been done, but that results did not prove its value, and that it was not an advisable experiment.

Dr. Howe said it called to his mind the treatment of "acne" by chrysophanic acid, where the irritation was productive of the best results; had treated several cases successfully with it, and that clinically the fact was very interesting. The strength used was twenty grains to one ounce of vaseline.

Dr. Fell spoke of a case of "acne," in an aggravated form, of seventeen years' duration, which was so treated, with a complete cure.

Dr. Cronyn said it had been used a long time, but was considered a dangerous remedy, and he should be extremely cautious about using it.

Prevailing Diseases—Dysentery, typhoid fever, follicular pharyngitis and some cholera infantum.

CLAYTON M. DANIELS, *Secretary*.

ERIE COUNTY MEDICAL SOCIETY.

SPECIAL MEETING, SEPTEMBER 8, 1883, TO RECEIVE THE REPORT OF THE COMMITTEE ON LEGISLATION, EMBODYING A DRAFT OF "AN ACT TO ESTABLISH THE MEDICAL FACULTY OF THE UNIVERSITY OF THE STATE OF NEW YORK AND TO REGULATE THE LICENSING OF PRACTITIONERS OF PHYSIC AND SURGERY."

In the absence of the President (who was not in the city), Dr. Hopkins, as Vice-President, called the meeting to order, and having stated the object of the meeting to be the reception of the report of the Committee on Legislation, etc., of which com-

mittee he had the honor to be Secretary, he therefore asked Dr. Storck to take the Chair. Dr. Hopkins prefaced the reading of the bill by the following remarks :

“ The University of the State of New York was intended by its founders to be the organic head of the educational system of the State. Its influence was to be exerted and its control exercised over the various institutions of learning by a direct supervision of their incorporation, and then by a continuous system of visitation and reports. The University was first incorporated in 1784, and its present authority is a law passed in 1787, which law is said to have been drawn by Alexander Hamilton, who was a member of the assembly at that time. The control of the University is by its Board of Regents, which consists of four *ex-officio* and nineteen other members, chosen by the legislature. The *ex-officio* members are the Governor, the Lieutenant-Governor, the Secretary of State, and the Superintendent of Public Instruction. The elected members must be citizens of the State, and must not be officers of any college or academy. The ninety-fifth report of the Regents, for 1882, includes returns from thirty-six colleges, having an attendance of 9,923 students, and showing graduates for the year, 1,644 in number. Besides this, the Regents visit about 250 schools of academic grade and distribute to them a school fund of about \$40,000 a year.

“ The uniform and intelligent development of the educational interests of the State has not altogether followed the lines laid down by the framers of the constitution of our University, in that the legislature has, from time to time, granted charters to colleges upon terms less likely to secure the permanent efficiency of such institutions than would the terms imposed by the Regents, the policy of the Regents having been to discourage the establishment of feeble and ill-endowed institutions and to foster and encourage those with ample endowments. Although occasional legislative acts have been at variance with the educational policy of the University and of the State, the great mass of legis-

lation is quite in harmony with, and, in fact, has been shaped by that policy.

“As a member of the Committee on Legislation of the Medical Society of Erie County, the writer was led to look with some little care into the history of medical education in our State, and, as a result of such study, is of the opinion that the faults of our present time are in great measure due to the neglect on the part of the proper authorities to develop and carry into effect the profoundly wise and statesmanlike ideas of Hamilton and his associates, shown in the formation of our State University. The bill which that committee is about to report to the county society is drawn with the view of attempting to turn the stream of medical education into the channel indicated by the early framers of our educational policy. This bill proposes the establishment of the Medical Faculty of the University of the State of New York, and further proposes to endow that Faculty with the sole authority to grant licenses to practice physic and surgery in the State. In conversation with members of the committee, it was thought that it would not be without interest to the society to have a brief digest of this bill submitted for its consideration. This bill will probably be offered upon the authority and responsibility of our county society, and it is the hope of the committee that under such authority the co-operation of the medical profession of the State may be secured to urge its passage by the next legislature.

“As before remarked, the bill provides for one more step in carrying out the idea of a University, by providing for the Medical Faculty of such University, and will have the immediate result of separating the teaching and the licensing powers. Under its operation the faculties of the various medical colleges will teach, but that of the University only will license. Not only will the Faculty of the University not teach, but no man will be eligible to a position upon that Faculty who is connected with any teaching Faculty. The divorce of the teaching and licens-

ing powers is to be absolute and unconditional. This is in harmony with the plan of the University, which provides that no person officially connected with any college or academy shall be eligible to the position of Regent.

"The bill provides that the Governor shall appoint this Faculty, consisting of nine members, who shall be legally authorized practitioners of physic and surgery, and stipulates that none of them shall be connected with any medical school, and that, in such appointments, the several systems of medicine shall receive *pro rata* representation, and that no one can enter upon the practice of medicine in this State after November 1, 1884, without the license of this Faculty. Appointments shall be made for three, four, and five years; after the first all shall be made for the long term. This Faculty is made the highest medical body in the State, and is to have the oversight of all medical societies and institutions, and may be appealed to by all such societies upon any question at issue in the same concerning any subject upon which such society is authorized to make by-laws, and is expected to so influence such societies that they may more efficiently carry out the object for which they were established. The proper officer may administer an oath, and the Faculty may take testimony upon any matter coming within their powers. They shall meet at least twice a year, and examine candidates for licenses to practice medicine, and shall report in writing to the Regents of the University all questions, answers, and opinions in each case. The examination shall be in anatomy, physiology, histology, pathology, theory and practice of medicine, chemistry, surgery, obstetrics, materia medica, therapeutics, and such other branches as they may consider proper. The questions in materia medica, therapeutics, practice of physic and surgery or obstetrics, except the practical parts thereof, shall be proposed by an examiner in the same school to which the candidate wishes to be licensed; in all other respects the examinations shall be the same in each

case. The records of the examinations and the findings of the Faculty are to be a part of the public records of the University. Graduates of medical colleges in good standing with the Faculty, who are over twenty-one years of age, and of good moral character, are eligible to examination on paying a fee of twenty-five dollars. At least six members must vote in favor of a candidate to give him a license, and then the Regents of the University grant the license, for which the candidate pays the further sum of fifteen dollars. The Faculty also have the power to declare what shall be unprofessional conduct, and to withhold or revoke licenses for the same; such a vote must also be by a two-thirds majority. The Faculty shall elect such officers and establish such rules as they may deem necessary, subject to the approval of the Regents. The bill has no action upon persons now practicing under a legal registration, and provides that all persons wishing to commence the practice of medicine in this State must, besides getting the license of the Medical Faculty of the University, register in the county clerk's office the name, residence, place and date of birth, date of diploma, the institution granting the same, and the date of license to practice in this State; shall exhibit the diploma and license, and swear to the same; to swear falsely in registering will constitute perjury, and to practice under an illegal diploma, or without license, shall be a misdemeanor, rendering the person guilty thereof liable to a fine of two hundred and fifty to five hundred dollars for the first offense, and afterwards to the same fine, and to imprisonment for not less than thirty, nor more than one hundred and eighty days. The bill defines the term 'practice of physic or surgery.' It charges itinerant venders of drugs or nostrums a license fee of one hundred dollars a month, and exempts from its provisions the commissioned medical officers of the United States army, navy, and marine-hospital service, and the members of the house staff of any legally incorporated hospital."

The full text of the bill is as follows :

AN ACT TO ESTABLISH THE MEDICAL FACULTY OF THE UNIVERSITY OF THE STATE OF NEW YORK, TO REGULATE THE LICENSING OF PRACTITIONERS OF PHYSIC AND SURGERY, AND TO FURTHER REGULATE THE PRACTICE OF PHYSIC AND SURGERY.

SECTION 1. On or before the first day of June, 1884, the governor shall appoint the Medical Faculty of the University of the State of New York, to consist of nine (9) members, who shall be legally authorized practitioners of physic and surgery in this State, but none of whom shall be connected with any medical school or college; provided, that in the appointments made the representation of the several systems of medical practice recognized by the incorporated State medical societies of this State shall be in the proportion of six, two and one, that is to say, the system having the largest number of licensed practitioners to have six, that having the next largest to have two, and the remaining system to have one representative; and all persons desiring to enter upon the practice of physic and surgery in this State after November 1, 1884, shall, before so doing, comply with the provisions hereinafter prescribed and obtain the license hereinafter provided.

SEC. 2. Of the nine members of the said Medical Faculty three shall serve, in the first instance, for three years, three for four years, and three for five years; and these terms shall be severally distributed by lot at the first meeting of the said Faculty. All appointments made in the Faculty at the expiration of the several terms fixed above shall be made uniformly for the period of five years each. All vacancies occurring in the said Faculty, from whatever cause, shall be filled, before the next semi-annual meeting of the same, by the appointment by the Regents of the University, from persons nominated by the several State medical societies (in case such nominations shall be made) of a practitioner of the system of practice that had previously been represented by the seat so vacated.

SEC. 3. The said Medical Faculty shall examine all applicants for license to practice physic and surgery in this State. They shall meet at least semi-annually, and at such meetings shall faithfully examine all candidates referred to them for that purpose by the chancellor of said University and furnish him a detailed report in writing of all the questions and answers of each examination, together with a separate opinion of each examiner as to the qualifications and merits of the candidates in each case. The president or secretary of the Faculty shall have authority to administer oaths, and the Faculty to take testimony in all matters relating to its duties.

SEC. 4. Such examination shall be in anatomy, physiology, histology, pathology, theory and practice of medicine, chemistry, surgery, obstetrics, materia medica and therapeutics, and such other branches in the several departments of medical science as the said Faculty may agree upon, subject to the approval of the Regents of the University. The questions forming such examinations shall be the same for each class of candidates offering themselves,

with the exception of the departments of materia medica, therapeutics, practice of physic and surgery or obstetrics, except the operative practical parts thereof, in which branches the questions for each candidate shall be prepared by the representatives in the board of examiners, of the system of practice to which such candidate wishes to be licensed.

SEC. 5. The said reports of the examination shall forever be a part of the public records of said University, and the orders of the chancellor addressed to the Medical Faculty, together with the action of the Regents in each case, shall accompany the same.

SEC. 6. Any person, on paying twenty-five dollars into the treasury of the University, and on applying to the chancellor for the aforesaid examination, shall receive an order addressed to the aforesaid Medical Faculty, instructing them to examine the candidates at one of the regular semi-annual examinations, provided that proof satisfactory to the chancellor is first given that the candidate is over twenty-one years of age, of good moral character, and has received a diploma issued to him or her, conferring on him or her the degree of doctor of medicine from some legally incorporated medical college held to be in good standing by the said Medical Faculty.

SEC. 7. The Regents of the University, after finding that not less than two-thirds of the members of said Faculty have voted in favor of a candidate, and that such examination has been a satisfactory test of the qualifications of said candidate, shall issue to him or her a license to practice physic or surgery in the State of New York, for which license the candidate shall pay to the University the further sum of fifteen dollars.

Said Faculty may refuse to recommend a license to individuals guilty of unprofessional or dishonorable conduct, and they may revoke licenses for like cause upon a two-thirds majority vote after giving the accused an opportunity to be heard in his or her defense.

SEC. 8. The moneys paid to the University under the provisions of this act shall be appropriated by said Regents for, and shall defray the expenses incurred under the provisions of this act.

SEC. 9. The Medical Faculty shall establish such rules and regulations and elect such officers as they may deem necessary to insure the faithful execution of this act, subject to the approval of the Regents of the University.

SEC. 10. Subsequent to the first day of November, in the year 1884, every person (excepting such as have heretofore lawfully registered pursuant to the laws of the State in force at the time of the passage of this act) upon complying with sections 6 and 7 of this act shall, before commencing to practice physic or surgery, register in the clerk's office in the county where he or she practices or intends to practice physic or surgery, in a book to be kept by the said clerk, his or her name, residence and place and date of birth, together with the date of his or her diploma and by what institution granted, with his

or her license to practice physic or surgery within this State: at the same time the person so registering shall exhibit both the license and the diploma herein required to the clerk, and subscribe and verify by oath or affirmation, before a person duly qualified to administer oaths under the laws of this State, an affidavit containing a plain statement of all the facts as aforesaid, including his or her age, and shall file said affidavit and copy of said diploma with said clerk; said county clerk to receive a fee of twenty-five cents for such registration, payable by the person so registering. Nothing in this section shall be so construed as to prohibit medical consultations in the different counties of the State between legally qualified and registered physicians of this and neighboring States.

SEC. 11. A person who shall willfully swear falsely to any statement contained in the affidavit required by the tenth section of this act shall be deemed guilty of and subject to conviction and punishment for perjury, and a person who violates any of the other provisions of this act, or who shall practice physic or surgery in this State under cover of a diploma unlawfully issued or illegally obtained, or without a license as provided for in this act, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than two hundred and fifty dollars nor more than five hundred dollars for the first offense, and for each subsequent offense by a fine as aforesaid and by imprisonment for not less than thirty days and not more than six months. The fine when collected shall be paid, one-half to the person or corporation making the complaint, the other half into the county treasury, of the county where such conviction shall be had.

SEC. 12. For the purpose of this act the words "practice physic or surgery" shall mean to annex the letters "M. D." to one's name, or to suggest, recommend or prescribe, direct or employ, as a matter of business or for a fee, for the use of any person, any drug, medicine, appliance, apparatus or other agency, whether material or not material, for the treatment, cure, relief or palliation of any real or supposed ailment or disease of the mind or body, or for the treatment, cure or relief of any wound, fracture or other bodily injury or infirmity, or any deformity. Any itinerant vender of any drug, nostrum, ointment or appliance of any kind, intended for the treatment of disease or injury, or who shall, by writing or printing, or any other method, publicly profess to cure or treat diseases, injuries or deformities by any drug, nostrum, manipulation or other expedient, shall pay to the State a license of one hundred dollars per month, to be collected as provided for by law, as all other licenses are now collected.

SEC. 13. Nothing in this act shall apply to commissioned medical officers of the United States army or navy, or of the United States marine hospital service, nor to any of the members of the house staff of any legally incorporated hospital during the term of their service as such.

SEC. 14. So much of chapter seven hundred and forty-six, laws of eighteen hundred and seventy-two; chapter five hundred and thirteen, laws of eighteen hundred and eighty; chapters eighty-six and six hundred and seventy-nine, laws of eighteen hundred and eighty-one, as are inconsistent with this act, and all other acts and parts of acts inconsistent with this act are hereby repealed.

SEC. 15. This act shall take effect immediately.

After the reading of the bill it was, on motion, seconded, taken up and considered by sections. A few objections were raised to certain of its provisions, notably that excluding College men from positions on the Board. The questions were well and earnestly discussed, with the result of the final adoption of the bill as printed by a unanimous vote.

Selections.

IMPROVED METHOD OF CIRCUMCISION.

Neil Macleod suggests a change in the method of performing circumcision. He dilates the orifice in the prepuce with forceps, making also, if necessary, very slight snips with scissors around the margin of the dilated orifice, until it will admit of retraction over the glans. Adhesions are broken down by means of a probe passed between the glans and the prepuce. The whole glans having been exposed, the prepuce is then drawn forward again, and a clip, formed by tying together two ordinary directors, is slipped over the loose end of the prepuce, marking the amount to be cut off. Three carbolized silk threads are then passed, at equal intervals, through the prepuce close to the clip on the proximal side, the glans being protected as the needle was passed, and the threads long enough each for two sutures. The prepuce in front of the clip is then cut off close, the clip removed, vessels twisted or tied if preferred; the threads are fished up with a blunt hook from the now enlarged preputial slit, cut and tied on each side. The orifice in the mucous layer may then be slit up to the corona, if necessary; but if the clip be so placed

as to run in the direction from the meatus to the corona, this will be unnecessary. Any simple dressing may be used.—*Edin. Med. Jour.*, March, 1883.

GAULTHERIA IN RHEUMATISM.

At a meeting of the New York Medical and Surgical Society, Dr. Flint said that one of the house physicians at Bellevue Hospital had furnished him with the following statistics with regard to the use of gaultheria in that institution in cases of articular rheumatism (*New York Medical Journal*). Of thirteen cases thus treated of which the histories were given, one patient contracted pneumonia after the cure of the rheumatism, and died in the hospital; a second one remained in the hospital, at the expressed wish of the commissioners some time after cure of the remaining eleven cases; the longest duration of the disease in any one case was fifteen days, and the shortest two days. The average length of time the eleven patients remained in the hospital was a fraction less than five days. These figures would seem to point to rather better results from the drug than those which were ordinarily obtained from salicylic acid. The oil of wintergreen was the preparation used, and it was administered several times a day in ten drop doses in flax-seed tea, which made it less disagreeable to the taste and to the stomach. In some of the cases the alkaline treatment was employed at the same time with the gaultheria.—*Weekly Medical Review*.

PASTEUR'S PRECAUTIONS AGAINST THE CHOLERA.

M. Pasteur has given the following instructions to the members of the mission sent by the French government to study the present epidemic of cholera. These instructions all relate to the contingency of resisting the maximum amount of causes of contagion, and are framed on the hypothesis that cholera does not enter the animal economy by the respiratory passages, but by the digestive tract only, except in very exceptional cases

They are contained in the *Revue de Hygiene* for August, 1883.

1. The drinking-water of the locality where the mission settles to undertake researches should not be used without having been first boiled, and shaken, when cold, for two or three minutes in a phial or bottle, half filled and stoppered. The water of the locality may be used if it be drawn at the source itself in vessels which have been exposed some moments to air heated to about 150° Cent. (302° Fahr.), or, better still, to a higher temperature. Natural mineral waters may be used with advantage.
2. Wine which has been warmed in bottles to from 55° to 60° Cent. (131° to 140° Fahr.), may be drunk in glasses which have been warmed in a similar way.
3. Thoroughly cooked food only should be used, or raw fruit well washed in water which has been boiled, and which has been kept in the same vessels in which it was boiled, or which has been poured from those vessels into other heated vessels.
4. Bread should be cut into thin slices and exposed to a heat of about 150° Cent. for twenty minutes at the utmost after it has been cut in slices.
5. All the vessels employed in the preparation of food should be warmed to a temperature of 150° or more.
6. Bed-clothes and body-linen should be plunged into boiling water and then dried.
7. Water for washing should be brought to boiling point; and, after cooling, one five-hundredth part of thymic acid (a litre, $1\frac{3}{4}$ pint, of alcoholized water to two grammes of acid), should be added, or one-fiftieth (a litre of water to twenty grammes) of carbolic acid.
8. The face and hands should be washed several times daily with water which has been boiled, and to which carbolic acid dissolved in water has been added.
9. In cases only when it would be required to handle the bodies of cholera patients, or sheets or body-linen soiled with their injections, it would be necessary to cover the mouth and the nostrils with a little mask formed of two pieces of fine metallic cloth, containing between their surfaces wadding about the thickness of one centimètre or more. This mask should be warmed to 150° , and the temperature should be renewed on each fresh occasion of peculiar infection.

DR. GOODELL'S MIXTURE OF THE FOUR CHLORIDES.

The following is known as Dr. Goodell's mixture of the "four chlorides," which he prescribes as an alterative tonic :

R̄.	Hydrarg. bichlor,	grains j-ij.
	Liq. arsen. chlor,	drachm j.
	Acidi. hydrochlor, dil.	
	Tr. ferri. chlor., of each,	drachms ij.
	Syr. Zingib,	ounces ij.
	Aquæ ad.	ounces vj.

M. Sig.—two teaspoonfuls three times daily in water, after meals.—*Canada Lancet*.

Editorial.

MEDICAL EDUCATION IN THE STATE OF NEW YORK.

Ever since the JOURNAL has been under its present editorial management it has been outspoken in exposing the iniquities of our present system of medical education; and we have urged with all boldness the application of the only effective remedy, namely, the complete separation of the unfortunate, unwise and debasing copartnership of the educating and licensing powers. As a brave step in the right direction, therefore, we rejoice to be able to call the attention of our readers to the proceedings of the Erie County Medical Society, as published in this issue. The committee on legislation have well done the duty imposed upon them, and deserve the thanks and hearty support of every member of the profession in the State of New York.

The subject of State control of the practice of medicine in other commonwealths has been well studied, the peculiarities of our own State regulations and institutions critically observed, and a bill drafted which seeks to embody the necessities and advantages of both. More than this, the committee appointed to do this work, by a bare majority vote, have so won the con-

fidence of the profession that the draft of the bill reported by them, after careful consideration and thorough discussion, was unanimously adopted. We consider this latter fact of the most hopeful augury.

As will be seen, the bill is by no means a compromise. Far from it. On every issue involved in this question there is the most unmistakably plain speaking.

The body which this bill would create is a "mixed" body, will be the sole licensing body in and for this State, and will not be composed of, nor controlled by, the professors of our too many medical schools.

More than this, this faculty, the sole representative medical body in the State, will have the power to say what medical schools in this and other countries are in good standing in this State, and also power to declare what is and what is not professional conduct. Surely these are not compromise provisions; and that a full meeting of our county society could endorse such a plan convinces us that our whole profession is seriously in earnest in this business, and willing, in many instances, to drop individual preferences, rather than risk the chance of co-operating on the main question.

As we have before said, this is "something worth fighting for," and it is an augury of success that all the great medical journals of the State are speaking with no uncertain sound in support of the bill. The interest in the success of the bill is by no means confined to the State, but the movement is watched with intense interest by the profession all over the country, and a victory in the battle for higher medical education in the Empire State, ensures the rapid introduction of similar laws in every State of the Union. The *Philadelphia Medical Times*, among others, speaks out boldly on the subject, and urges, as the sole remedy for the present iniquitous system of medical education, the taking from the colleges the right to grant licenses to practice. "So long as men can make thousands of dollars yearly by the sale of diplomas, and hide their crime under the cloak of teaching, so long

will the consciences of many be dumb and without feeling." "Whether we like it or not," says the *Times*, "if success is to be achieved, the existence of homœopathy must be recognized in the formation of the board." This opinion is concurred in by every one who has given the subject serious thought.

And now to work. The matter must not be left to officers of societies. We call upon every individual member of the profession to use all his influence to secure the passage of the bill. The committee propose to place a copy of it in the hands of every medical man in the State, and if physicians do their duty, every member of the coming legislature can be made to understand all the provisions of the bill, to recognize their fairness and necessity, and to be prepared to vote in favor of it.

AN IMPORTANT BUSINESS CHANGE.

Davidson's drug store, so long and favorably known to the profession of this city, has changed hands, having been purchased by Messrs. Shaver & Co. Dr. Davidson's skill as an analytical chemist is so well known throughout this and adjacent counties that his chemical work, together with the treatment of diseases of the kidneys and genito-urinary organs and diseases of the skin, to which he particularly devotes himself, have long made it impossible for him to give his personal attention to the drug business. In these important specialties of medicine, our esteemed editorial associate has had rare opportunities to perfect himself by his study in Philadelphia and London, and in them his chemical and microscopical knowledge are of peculiar service to him. In the department he has selected there is a wide and increasing field of work for the profession and of usefulness to the public, and we join in congratulations that he is now enabled to devote himself entirely to professional duties, which, though sufficiently arduous and exacting, are more congenial to his tastes, and in which he has already achieved merited success. The business assumed by

Messrs. Shaver & Co. comprises an old and well-established trade, which has always been noted for the purity and reliability of drugs dispensed. The public know so well the accomplished senior partner of the new firm, Mr. Shaver, who has won the confidence of the profession by his excellent pharmaceutical attainments, that an endorsement here is almost superfluous. We wish to commend him to all as especially deserving of patronage, which he will be sure to merit. The change, therefore, is in every respect advantageous to our confrere, and to the drug interests of our city.

L.

EDITORIAL NOTES.

WE are in receipt of a kind invitation to be present at the celebration of the one hundredth anniversary of the Medical School of Harvard University and the dedication of its new building.

THE *Medico-Legal Journal* is one of the new ventures in journalism. It is the organ of the Medico-Legal Society of New York City, and promises to be a valuable addition to the list of American journals. The society is made up of distinguished members of the medical and legal profession, and has made many valuable contributions to jurisprudence and toxicology.

AMONG the numerous vehicles for the administration of quinine in a tasteless form, syrup of licorice is by far the most effective, and the preparation of Gregory's, of "Syrup of Dover's" fame, seems to be particularly well fitted to accomplish the purpose. Three grains of quinine added to a teaspoonful of the syrup of licorice, Gregory's, makes a palatable mixture, the bitterness of the quinine being effectively masked.

WE would call the attention of our readers to the advertisement of the *Duroy Native Wines*. We have given these wines careful trial and examination, and are convinced that the only addition to the pure juice of the grape is a little pure sugar, doubtless added to improve the keeping quality. We are glad to see that our principal druggists have these excellent wines in stock, as we believe them worthy of the entire confidence of the profession.

A GOOD electrical battery is now a necessity to every physician. Among the many varieties offered, it is not easy for the uninitiated to choose the best. From personal knowledge, we do not hesitate to commend the instruments furnished by the McIntosh & Faradic Galvanic Battery Co. Their combined galvanic and faradic battery is, take it all in all, the best and most convenient in all respects for the use of the physician now in the market.

OBITUARY.

Since the last issue of the *JOURNAL*, one of Buffalo's most honored physicians has gone to his rest. Dr. Sylvester Frederick Mixer died on Sunday, the 16th ult., at the age of sixty-eight. He was born in Morrisville, N. Y., December 27, 1815, and was graduated from the Medical Department of Yale College in 1841, and in that year began the practice of medicine in Buffalo. In 1847 he took the degree of M. D. from the College of Physicians and Surgeons of New York City. He was a member of the Medical Society of the State of New York, and of the Buffalo Medical Society, of which he was President in 1852. He was also a member of the Medical Society of the County of Erie, and of the American Medical Association; and from 1858 to 1874 was attending physician to the Buffalo General Hospital, to which institution he was subsequently appointed consulting physician.

The special meeting of the Erie County Society, which was called to take action in regard to his death, was very largely attended, and the expressions of the members present bore testimony to his high character, both as a man and a physician, and to the esteem and affection which he had honestly won from his professional brethren by a long life full of honor and integrity. The following resolutions were unanimously adopted:

It becoming, in God's providence, our afflictive duty to meet and pay honor to our departed brother, Dr. Sylvester F. Mixer, for some forty-two years a member of this society and probably its oldest member, at least resident in the city, as an expression of our sense of what is due to his memory, be it

Resolved, That by reason of his great worth as a man and his great excellence as a physician, we feel profoundly that we sustain by his death no ordinary loss.

2. That by reason of his marked characteristics, his acute sense of honor, delicate regard for the interests of his professional brethren, and for loyalty to his profession under all circumstances, he exemplified in this life a grand type of the blessed Christian physician.

3. That with the expression of our tenderest sympathy with the bereaved wife and family, we will regard it as a sad but sacred privilege to attend the funeral and to the last resting place the remains of our beloved brother and friend.

4. That our action upon this occasion be furnished the BUFFALO MEDICAL JOURNAL and daily papers.

DR. OTTO CARL BOYSEN died very suddenly September 20th, at the age of fifty-seven. He studied medicine in Keil, Germany, but owing to the political disturbances of 1848, was compelled to leave Germany before taking his degree. Upon his arrival in this country he settled at Waynesburg, Stark county, Ohio, where he practiced medicine for fifteen years. Subsequently, he went to Cincinnati, and graduated in medicine at the "College of Medicine and Surgery." In 1867, he took up his residence in Buffalo, but for some years past had declined the active practice of medicine, confining himself almost exclusively to pharmacy.

Reviews.

The Essentials of Pathology. By D. TOD GILLIAM, M. D., Professor of Physiology, Starling Medical College, formerly Professor of General Pathology, Columbus Medical College, Columbus, Ohio. Philadelphia: P. Blakiston, Son & Co. 1883.

The author of this compilation states that the object of the work is "to unfold to the beginner the fundamentals of pathology in a plain, practical way," and we must admit that he has

fairly accomplished his purpose. The value of the book is increased by numerous admirable illustrations, which look very familiar, and a comparison shows that they are largely taken from the classical work of Rindfleisch. It would have been only fair to have acknowledged this in the text, but they not the less greatly add to the value of the work. We think such a work as this was needed, and we predict for it a large sale.

Practical Clinical Lessons on Syphilis and the Genito-Urinary Diseases.

By FESSENDEN N. OTIS, M. D., Clinical Professor of Genito-Urinary Diseases in the College of Physicians and Surgeons, New York. Surgeon to Charity Hospital, etc., etc. New York: Birmingham & Co. 1883. Six hundred pages, cloth, \$4.50.

The work is divided into two parts: Part first treats of syphilis and the genito-urinary diseases. Part second is devoted to the special consideration of gonorrhœa and its sequelæ. The entire work embraces a discussion of every topic in the field of genito-urinary surgery, to which the distinguished author has directed his life. Professor Otis ranks to-day among the most distinguished exponents of urethral surgery, and as the writer found, while in Europe, is as well known, and his writings as highly valued there as in America. His views as to the nature and treatment of gonorrhœa, and urethral stricture, and the normal urethral calibre, have, if not entirely accepted, at least largely modified the previous teaching. The present work is not intended as a full and systematic treatise on syphilis and genito-urinary diseases, but it is rather a clinical and practical presentation of the subject illustrated by reports of cases drawn from the author's rich experience. The book should be read by every physician who treats genito-urinary diseases and syphilis. We believe that they will find in it much of great practical value, and the cases recited, and the principles and practice advocated, will serve to explain many cases otherwise obscure and difficult of management.

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Original Communications.

CLUB FOOT.*

BY HERMAN E. HAYD, M. D., M. R. C. S., ENG.

Mr. Chairman and Gentlemen:—Perhaps there is no special department in the vast domain of surgery that has made such progressive strides as orthopædia. Known slightly to the ancient surgeons, practiced by Hippocrates and his followers, to a very limited degree, and developed to its present scientific importance and practical utility during our own period, and largely during the last decade. It is two hundred years ago since tenotomy was first performed by a Dutch surgeon, for the relief of torticollis. For nearly one hundred years it fell into disuse, on account of the very erroneous ideas held by the most eminent surgeons regarding the extreme sensibility of tendons, and the very grave dangers attending their division. But with increased and advanced ideas in pathology, with the subject of inflammation and reparative union, well studied and well understood, with the assistance of anæsthetics and antiseptics, to encourage the surgeon in his experimental labors, this department soon had its ranks well filled with earnest workers, and

* Read before the Buffalo Medical Association.

thus, at this early day, Valentine Mott's prophetic visions have been realized, and orthopædic surgery, as if by magic touch, has unbound the fettered limbs, restored symmetry to the distorted form, given mobility to the imprisoned tongue, and directness to the orb of vision.

I may here briefly say, that amongst the great number of orthopædic surgeons in the world, with all their valuable contributions, we are mostly indebted to Little, in England, to Stromeyer, on the Continent, and Sayre, in America, for the great work which they individually have done.

Club foot may be divided into two great classes, from an etiological standpoint, namely, paralytic deformities and spastic or spasmodic distortions, which may be either congenital or acquired. And these, again, can be subdivided into various forms, according to the degree and character of the deformity. Thus we have talipes equinus, in which the heel is drawn up by the calf muscles, through their common tendon, the tendo achillis; talipes varus, in which the inner side of the foot is drawn upwards by the flexors, assisted by the tibials; talipes valgus, in which the outer side of the foot is drawn up by the peronei; talipes calcaneus, in which the foot is drawn up and the heel remains depressed. Again, various combinations of these occur, as talipes equino-varus, talipes equino-valgus, talipes calcan-varus, talipes calcan-valgus, etc., etc.

The cause of these deformities is often veiled in much obscurity, more especially those forms which occur "in utero." First of all, heredity seems to exercise some influence in this as in other deformities, and some very striking cases of hereditary transmission have occurred. For instance, Mr. Bryant says that the male branches of a family seem to be more prone than females in this respect, following the ordinary law of all deformities. Under his own care, he had a case of talipes varus, in which the child's father, grandfather and great grandfather, on the father's side, all had congenital talipes. Second, any condition, cause or disease, which will give rise to paralysis or loss

of power to a single muscle, or a group of muscles, may give rise to talipes, by the opposing muscles becoming unduly contracted. Third, any irritative cause in the cerebro-spinal system, which will produce spasm of a muscle, perhaps at first overcome by the will, may be, in time, the cause of talipes. Under this latter cause, we may class many of the congenital varieties, for in these cases Little thinks there seems to be present some stimulus or irritant in the medulla spinalis, which acts upon certain ganglionic cells there, and thus keeps a certain muscle, or group of muscles, contracted, and in time produces a structural shortening of the member.

But this will not account for those cases in which there is not only a structural shortening of a muscle, but an ill-development of one or more bones, and possibly the whole foot, so that instead of having tarsal, metatarsal and phalangeal bones, the foot may be deprived of its digits, or metatarsals, and have nothing more than ill-formed tarsals covered with skin, etc. After having searched for a cause of these and like deformities of the hands, in works on general surgery, and to no avail, I resolved to go into this subject by referring to the physiological processes of development, and I now present to you a theory which will perhaps explain the pathology of congenital club foot and the more gross deformities of the feet and hands. After the sperm cell has united with the ovum, and gone through the process of segmentation, and its little fine granules and cells have arranged themselves to form the blastodermic layer, and its division into the epiblast and hypoblast has taken place, then I seek for the cause of these anomalies of development. Upon this lower layer or hypoblast certain cells become flattened, and as it were migrate to the centre and constitute a third layer or the mesoblast. From the epiblast is developed the epidermis, the cerebro-spinal system, the sensorial epithelium of the eye, ear, nose, etc. From the hypoblast, the epithelium of the gastrointestinal tract, the abdominal organs and their ducts, etc., and from the mesoblast is developed the tissues and organs of the

body, intervening between these two as the whole group of connective tissues, including the tissues proper, the muscles, bones, arteries, nerves, etc. Now, is it not possible that some cause, disease or injury on the part of the mother, or her conceived ovum, may interfere with the proper development of this mesoblastic layer, and consequently give rise to an improper development and formation of those tissues which nature destined them to form; and if that degeneration takes place in those cells which were to go on and develop the feet, a corresponding want of development in them would take place, and so also with the other members of the body.

While studying in University College Hospital, London, I had frequent opportunity of observing how often talipes varus, when of congenital origin, was associated with other anomalies in development, the most common being spina bivida. We also observed that as Mr. Heath cured this condition by injecting into the sac equal parts glycerine and iodine, the talipes was relieved, demonstrating that the talipes was the result of some irritative lesion in the spinal cord, and that as the pressure was relieved from the nerve roots, as they escaped through the vertebral foramina, the spasm was overcome.

The usual congenital form is talipes varus, and the more commonly acquired is talipes equinus or its modification, talipes equino-varus. It is this variety which I purpose inviting your attention to more particularly this evening. The accompanying photographs represent two little patients, the subjects of very marked talipes equino-varus, which Dr. Montgomery and myself operated upon some two months ago, and I have brought this little fellow here this evening to show you the result of the operation, and to demonstrate more easily the method of treatment adopted. His history is briefly as follows: Is eight years of age; family history good; always enjoyed good health since his early childhood; when thirteen months old had convulsions, which were probably the onset of infantile paralysis, as he was not enabled to walk for some months afterwards. Certain muscles

were no doubt paralyzed and began to waste, others became unduly contracted, and thus the starting point of his deformity. But as in many of these cases, as time rolled on, all the muscles regained their muscular tonicity. Those over-contracted ones drew up the os calcis, as well as the scaphoid and the internal cuneiform. He was therefore compelled to walk upon the side of his foot. Soon the astragalus was pushed out and became the heel; its ligamentous bands became relaxed. The external malleolus advanced forward until it was situated in front of the ankle joint, and nature, by a kind provision, developed a large cushion over the new heel, in the shape of a large bursa to protect her over-strained and over-worked joints; we thus found our little patient walking upon the outer borders of his feet, one leg crossing over and in front of the other, and a large bursa, the size of a hen's egg, situated over each astragalus and cuboid. On account of this distorted position the knee joints were strained, their ligaments became stretched, and so a partial internal dislocation of the knee joint complicated his pedal deformity.

Probably there is no disease that so frequently gives rise to talipes as infantile paralysis, and it is especially interesting to observe how certain groups of muscles, or certain individual muscles, as it were, are invidiously picked out and often become paralyzed.

As you are all aware, in the anterior coruna of the spinal cord are to be found a number of large nerve cells from which trophic fibres are given off; and in this peculiar affection (infantile paralysis) we find, upon microscopical examination, that these cells have degenerated, have become atrophied, and fibrous tissue has replaced them, the cord in different places has become sclerosed, and the greatest changes are to be seen in those portions of the cord whose function it was to preside over the muscles which have become paralyzed. So in certain irritative conditions affecting the antero-lateral columns, we get rigidity of certain muscles, as in spastic paralysis or bilateral sclerosis, and thus, on

the one hand, from a certain pathological lesion, we get either a paralytic or a spastic distortion; paralytic if the nerve center be degenerated, and spastic if it be irritated.

It is very convenient, and at the same time practical, to divide talipes equino-varus into certain divisions according to the degree of the deformity; and I think Little's classification is a very good one; for instance, his first class is the slightest deformity, and in which the position of the front of the foot, when inverted, is such that the angle formed by it with the inside of the leg is greater than a right angle, and in which the contraction is so moderate that the toes can be easily brought to a straight line by the hand of the surgeon, and the heel can be depressed to a natural position; second, those cases in which the inversion of the foot and elevation of the heel is about the same or slightly greater than the former, but no reasonable effort will temporarily extinguish the contraction or deformity; third, those cases in which the contraction of the soft parts and the displacement of the hard parts reaches the highest degree, so that the inner margin of the foot is situated at an acute angle with the inside of the leg, and sometimes in contact with it. Our case corresponded to this third variety, and the angle formed by the inner side of the left leg with the great toe was about an acute one, while that of the right was not so marked. One is not prone to believe that a foot could be so easily straightened after having occupied this acquired position so long, for the articular ends of the bones are more or less worn off by the constant attrition they were subjected to, and new articulations and new joints have been made. But yet, our every-day experience teaches us that the changes in the bones are but slight, and that unless the case be of congenital origin where the bones are too often ill-formed and ill-developed; even in club foot of long standing much can be expected and promised by operative measures.

Before taking up the treatment of talipes, let us briefly consider how nature sets about in her reparative process. When a tendon, inclosed within its sheath, is divided subcutaneously,

the divided ends separate for a variable distance, in an infant for about half an inch, and in an adult from one to two inches, depending upon the condition of the muscle fibre. After a period of repose, the sheath becomes softer, thicker and more vascular, its blood vessels are seen to be dilated, tortuous and varicose. About the divided ends of the sheath, a fibrinous blastema is thrown out, made up of an abundance of leucocythes and lymph cells, filled with nuclei and nucleoli, which soon extends and fills up the space between the separated ends. Little capillary blood vessels make their appearance in this mass. These lymph cells become gradually more and more elongated and fusiform in shape, until finally they become stretched out into thin, delicate, fibrous bands, which, in their turn, contract, press upon the little capillary loops, and change this once opaque, soft, gelatinous mass into firm, fibrous tissue. It is tough and resilient to the touch, and for years may be distinguished by its grayish, translucent color, from the white, glistening old tendon.

In a general way, the treatment of all foot deformities may be divided into the preventive and curative plans; and I am sure in no case is the old adage, "An ounce of prevention is worth more than a pound of cure," more applicable than in early club foot. If we meet with a case of congenital or early acquired club foot, we must give it our earliest attention, and we shall often find ourselves greatly remunerated for our trouble. By massage, electricity if the muscles be badly nourished, or certain ones unduly relaxed, daily working and manipulation of the foot, judicious stretching of the muscles so as to force the foot into its proper position, properly applied splints, and other appliances which the surgeon's own ingenuity will suggest, or well-directed strapping and bandaging, will save many a case from an operation. But after a careful trial of these several measures, we find that the shortening of the muscles, fasciæ, ligaments and integuments is not overcome; operate early, carefully and thoroughly, bearing in mind that all secondary operations avail but little, as adhesions, etc., are formed between the sheath and

its tendon at various places, which interferes, yes, baffles our efforts for remedying the deformity. If an operation be decided upon, it must be done subcutaneously, and the tenotome which I have in my hand answers very well. The plan we adopted was, first, anæsthetize our patient, then put the tendons well upon the stretch by forcibly flexing or extending the foot, and at about a distance of a quarter of an inch from the sharp edge of the tendon, which was thrown out in bold relief, a small incision was made by the sharp-pointed knife through the skin. This being done, the blunt-pointed knife was passed well under the tendon, and, by a see-saw motion of the knife, the tendon being tense, its division was made known by that characteristic snap, and the knife carefully withdrawn. We divided, in both feet, the tendo achillis, the plantar fascia and the tibialis anticus, and with forcible extension overcame the contraction of the tibialis posticus. I think the cases are very few which require the division of the tibials, and at all events, I believe in leaving them until one tries what forcible extension can do, and failing in this, divide them at another sitting. After having divided the tendons, we placed the feet upon a straight splint along the inner side of the leg, leaving them for three days in about the same position they were in previous to the operation. This is the practice of most continental as well as English surgeons, and I believe it is to be preferred to that plan of treatment advocated by Sayre, who at once breaks down the foot as much as possible and then puts it up in the plaster Paris on the same day as the operation is performed. First of all, the external wound heals more quickly and much more kindly than if left gaping, a natural consequence if the parts be torn asunder. Second, the slight hemorrhage which occurs in every subcutaneous operation is lessened and the little blood which has exuded into the opening made by the operation is more easily absorbed. Third, there is less danger of inflammatory trouble following, as the parts are left nearly in apposition with one another, and at perfect rest.

On the third day we again put our little patient under chloroform, and forcibly brought the feet into as good a position as possible, and held them there by means of a plaster Paris bandage. In about ten days we took off this bandage, and once more forcibly manipulated the feet and got them into still better position, and again applied the plaster casing. In another ten days we removed this bandage and took the measurements for a Tieman shoe, sold by Lyman & Jeffrey, once more readjusted the bandage and kept the feet in good position until the shoes were sent us. Then we applied the shoes, and with very little difficulty the little fellow soon began to walk. You will observe that on account of the knee complication, which, gentlemen, is now our great trouble, we were compelled to extend the iron brace, with knee and hip joints upon it, up to the hip, and there fastened it to a hip band. These boots have done very well, but first of all they are unnecessarily heavy, awkward and cumbersome, and shamefully expensive, the latter being a very unfortunate circumstance, as most children affected with club foot deformities, at all events to such a degree, are the offspring of very poor people.

In those very marked paralytic cases, where the leg may be thrown about like a flail and the ligaments of the knee and ankle joints greatly relaxed, little can be done. Still, friction, shampooing, electricity, salt water baths and douches, in fact any agent which will tend to keep the limb as well nourished as possible, are the measures indicated.

In closing, gentlemen, permit me to say that after having seen a great many cases of club foot, both in hospital and private practice, in which operations were performed, a few very practical lessons have been taught me: First of all, we must be patient, exceedingly kind and gentle in all our actions, in order to enjoy the continued confidence of the parents or guardians of the little one whom we are inflicting so much pain upon. Second, let us rather over-estimate the amount of pain which must be endured and the amount of attention and physical labor which

must be given by the attendants, or in the very midst of a brilliant success, when nothing remains but to keep the foot in position, our efforts will be thwarted, as mine were in the case of that pretty little girl whose photograph is being passed around, because so great a deformity usually occurs in the families of poor, unintelligent and sickly sentimental people, who would rather see their child deformed than see it suffer pain. Third, if possible operate in a hospital or some such institution where the immediate care of the child is left to suitable and capable nurses.

SOME INTERESTING AUTOPSIES.

BY FREDERICK PETERSON, M. D.

(Continued from September and October numbers of the Journal.)

NO. 28—PNEUMONIA. CHRONIC MENINGITIS. HEMORRHAGE IN PONS VAROLII.

State Insane Asylum, March 27—David Davis, æt. 67; dead sixteen hours; body well nourished; to left of larynx, wound $4\frac{1}{2}$ cm. in diameter in process of healing (suicidal attempt); bruises upon left knee and elbow joints.

Head: Dura mater normal; pia mater thickened; puncta vasculosa very marked; ependyma of ventricles thickened; in left side pons varolii a small spot 6 mm. in diameter, full of minute capillary ecchymoses, giving to this spot a dark red tinge altogether different from the white substance of the pons. Arteries at base of brain markedly degenerated (endarteritis deformans).

Chest: Right pleural cavity contained two litres of serum full of flocculent fibrin; pleura covered, on lower part of lung, with fibrin; emphysema of lungs (senile atrophy the cause); left pleura and cavity normal; middle and lowest lobes of right lung and lower lobe of left lung in stage of red hepatization (croupous pneumonia); upper lobe of left lung acutely congested and œdematous. Marks of old pericarditis; in pericardium

some sixty-four grammes of clear serum; valves normal; beginning endarteritis deformans in aorta and at bases of lunettes of aortic valve; myocardium fatty.

Abdomen: Spleen soft and friable; contained an infarct 4 cm. in diameter. Liver a little enlarged and somewhat fatty. Granular atrophy of both kidneys. Bladder and ileum normal. Stomach distended; exceedingly thin-walled; there seemed to be no destruction of mucous membrane, yet could see through the walls, so thin were they; tore easily; seemed as if muscular coat were absent; great congestion of the vessels of mucosa, with numerous extensive hemorrhages into stomach tissues (took arsenic some time before for suicidal purposes); chronic gastric catarrh.

Diagnosis: Pneumonia cause of death. Insanity from chronic meningitis. Chronic interstitial nephritis. Chronic gastritis. Apoplexy in pons varolii.

Remarks: The extravasation in left side of pons varolii caused dilatation of right pupil and convulsions.

NO. 30—ACUTE MILIARY TUBERCULOSIS OF LUNGS, LIVER, KIDNEYS
AND MENINGES.

Buffalo General Hospital, April 3—P. Balderspergen, male, æt. 45; dead fourteen hours. Body in fairly nourished condition; rigor mortis marked; physique remarkably fine.

Head: Pia and arachnoid inflamed and contained numerous minute tubercles.

Chest: Right and left lungs completely full everywhere of miliary tubercles; in right apex red hepatization from pneumonia; strong pleuritic adhesions on both sides. Heart in every way normal; beginning atheroma in aorta; signs of old pericarditis.

Abdomen: Spleen soft. Liver of normal size and full of minute tubercles scarcely visible to the naked eye. Both kidneys of normal size and containing numerous tubercles. Bladder distended with urine. Ileum normal. Pyloric end of

stomach somewhat inflamed with numerous ecchymoses. Some tubercles on peritoneum.

Diagnosis: Acute miliary tuberculosis of lungs, liver, kidneys and meninges.

Remarks: Shortly before death, patient was attacked with convulsions. One pupil was dilated. He died comatose.

NO. 40—CHRONIC GENERAL TUBERCULOSIS OF LUNGS, SPLEEN, KIDNEYS, RENAL PELVIS, PROSTATE GLAND, PERITONEUM AND INTESTINES.

Buffalo General Hospital, May 14—Kleinholz, æt. 53, male; dead twenty hours. Body long and emaciated; rigor mortis still present; small tumor 2 cm. in diameter over sternum, subcutaneous, full of cheesy matter (atheroma).

Head not examined.

Chest: Agonia clots in right heart; some atheromatous disease of aorta; myocardium somewhat fatty. Both lungs masses of tubercles and vomicæ, containing pus; everywhere strong pleuritic adhesions.

Abdomen: Spleen atrophied, soft, and contained two or three tubercles; capsule much thickened and partly cartilaginous. Liver small and fatty. Left kidney full of miliary tubercles; tubercular pyelitis, pelvis being full of pus and tubercles standing out from mucosa like granulations; pelvis also dilated and the ureter much larger than normal. Right kidney: pelvis normal; ureter smaller than normal, like a fine cord, but pervious; great amount of fat about pelvis; kidney structure normal. Prostate gland double its normal size and contained a large cheesy tubercle size of a hazel nut. Chronic cystitis. Testicles and epididymes normal. Mucosa of stomach covered with innumerable hemorrhagic erosions. Numerous ulcers in ileum, with tubercles in their borders. Upon the mesentery of bowels, a number of tubercles of small size.

Diagnosis: Chronic general tuberculosis.

Remarks: Tubercles in the prostate are very rare.

NO. 38—ACUTE TUBERCULAR MENINGITIS.

Buffalo General Hospital, May 9—A. Adel, æt. 21, male; dead twenty-one hours. Body small and emaciated; left chest sunken in; circumcised.

Head: Calvarium very thin and brachycephalic; great congestion of diploic veins, also of sinuses of dura mater and veins of pia mater. Dura mater thin and translucent. Pia mater and arachnoid thickened, opaque, and with here and there minute white points just visible to the naked eye, which, under the microscope, proved to be tubercles. At base of brain more than usual quantity of serum. Ventricles widened and full of red-tinged serum; ependyma soft. Brain substance itself normal.

Chest: Right pleura not adherent; left everywhere strongly bound to thorax. Right lung contained eight or ten small tubercles in apex, but otherwise normal. Left lung atelectatic and red hepatized. In axillary region the fourth and fifth ribs were broken, each in two places, about 10 cm. apart, the two fragments thus made being dislocated outward; some union had taken place; one of the inward projecting portions of rib, the fifth, was necrosed, and about it was an encapsuled inter-pleural cavity some 5 cm. in diameter, containing no fluid. Heart small.

Abdomen: Spleen and liver small, but normal. Kidneys normal. Bladder distended with urine. Stomach and ileum normal.

Diagnosis: Acute tubercular meningitis, with hydrocephalus internus acutus. Further croupous pneumonia of left lung, probably as a result of a comparatively recent fracture of ribs and pleuritic inflammation and suppuration.

Remarks: He entered the hospital but a few days before death, and his symptoms were chiefly those of the meningitis, with rapidly supervening coma. The fracture or pneumonia were therefore naturally unsuspected, and no history of a fall could be obtained even from his friends. Until within a few weeks he had been at work in a dry goods store as clerk.

NO. 43—SUBACUTE GENERAL TUBERCULOSIS.

Buffalo General Hospital, May 17—Reitz, æt. 62, male; dead nine hours. Body well formed, large; rigor mortis marked.

Head not examined.

Chest: In right pleural cavity three litres of clear serum; in left about one litre and a few adhesions; both lungs full of miliary tubercles; lower lobes consolidated. Pericardium thickened and adherent; heart normal.

Abdomen: Left kidney enlarged, hyperæmic, and contained several tubercles; right kidney much enlarged, hyperæmic, and full of tubercles. Liver enlarged and contained numerous tubercles, also very fatty. Spleen enlarged and contained several tubercles. In stomach some catarrhal inflammation. Ileum and bladder normal.

Diagnosis: Subacute general tuberculosis.

NO. 44—ACUTE TUBERCULOSIS OF MENINGES, LUNGS AND KIDNEYS,
IN A SEVEN MONTHS' PREGNANT WOMAN. DILATATION OF
RIGHT URETER ABOVE BRIM OF PELVIS FROM
PRESSURE OF CHILD. INTERESTING
ANATOMICAL POINTS.

Buffalo General Hospital, May 18—Margaret Z., æt. 30, emigrant; dead fifteen hours. Body well nourished; abdomen enlarged by seven months' child; rigor mortis marked.

Head: Dura mater normal. Numerous small tubercles in basilar meninges. Brain substance normal.

Chest: Strong adhesions of left pleura; left lung œdematous, full of miliary tubercles and consolidated in upper lobe. Strong adhesions also on right side; right lung also full of miliary tubercles, and œdematous. Heart normal.

Abdomen: Peritonitis over diaphragm, liver and spleen. Spleen contained numerous tubercles. Liver enlarged, soft and pale (cloudy swelling). In left kidney a few miliary tubercles and fatty degeneration; left ureter normal. Ureter of right kidney dilated just above brim of pelvis to four times its normal

size, due to direct pressure of the gravid uterus, which leaned way over to right side and did not press at all upon left ureter; right kidney enlarged, fatty, and contained some tubercles (first stage of parenchymatous nephritis). There were no tubercles to be found anywhere in the child, although careful search was made. This case was anatomically interesting. The uterus was very thin, not more than 1-2 mm. thick. The internal os was not open and neck not dilated. In the right ovary was the corpus luteum of the child, with its wrinkled, stellate border. The ureters could be traced down through the base of the broad ligament to their outlet into the bladder, an interesting point in pregnancy.

Diagnosis: Direct cause of death asthenia, from tuberculosis of meninges, lungs and kidneys.

NO. 59—GENERAL TUBERCULOSIS OF PERITONEUM, LIVER, KIDNEYS,
MENINGES, LUNGS AND MEDULLA OBLONGATA.

Buffalo General Hospital, August 2—D. Bisantz, male, æt. 33; dead twenty-two hours. Body emaciated; teeth good; no enlarged glands; no sign of cicatrix on penis; a few copper-colored patches size of pea on both legs.

Head: Calvarium thin; dura mater on left side normal; on right side under surface a slight old pachymeningitis and numerous excrescences, soft and yellow, from size of millet seed to four lines in diameter; on pia mater, over right hemisphere, also numerous of these yellowish excrescences, some protuding externally, others going deep into the white substance of the brain (seven of these were the size of hazel nuts, with soft, mushy, yellow interior; brain softened about them; all united by thin pedicles to pia from which they sprung). Both lateral ventricles enlarged, ependyma softened, contained blood-tinged serum. Pia and arachnoid everywhere thickened, but contained no unusual amount of serum. Pons normal. Very minute miliary tubercles on pia in fossæ sylvii. A hard, white tumor, size of hazel nut, in right side of medulla oblongata, close to

pons varolii, including anterior pyramid and olivary body of right side. Cerebellum normal.

Chest: Depressed on right side externally. In right pleural cavity two litres of serum full of fibrin; lung completely atelectatic and pushed up to apex of chest; pleura covered with fibrin. In left lung numerous cheesy tubercles from size of pin's head to that of pea and larger; no adhesions. Chronic bronchitis. Pericardium so adhered by old inflammation that it was impossible to remove it from heart; heart small; muscle normal; valves all normal; aorta dilated and covered everywhere on intima with smooth protuberances; just in front of aorta ascendens, at junction with the arch, a sacculated aneurism some 5 cm. in diameter externally, with thick stratified walls, and would hold about 12 ccm. of blood; the opening into this was $1\frac{1}{2}$ cm. wide.

Abdomen: Spleen enlarged and soft. The peritoneum, both visceral and parietal, everywhere covered with myriads of millet-seed growths; the omentum a perfect mass of these. Liver full of miliary tubercles. Chronic catarrh of stomach. Both kidneys enlarged, cyanotic and hard, each containing several small tubercles. Bladder and ileum normal.

Diagnosis: General tuberculosis of peritoneum, liver, kidneys, lungs, meninges and medulla ablongata. Farther, chronic bronchitis, gastric catarrh, pleurisy with effusion, chronic pericarditis, acute hydrocephalus internus and cyanotic induration of kidneys.

Remarks: This man was treated in the hospital where I was resident in 1879 for a fractured tibia and fibula. At that time he had no sign of tuberculosis. He was found this time unconscious in the street and paralyzed on the right side, and was carried to the General Hospital. No further history is given. He recovered consciousness in the hospital for a short time and seemed to improve, but finally succumbed comatose.

(To be continued in next number.)

Clinical Reports.

CASE OF ANEURISM OF THE ARCH OF THE AORTA; INTENSE
DYSPNEÆA; ABSENCE OF RECURRENT LARYNGEAL
PARALYSIS; PECULIAR DIFFICULTIES IN DIAGNOSIS;
DEATH; AUTOPSY.

BY FRANK DUDLEY BEANE, A. M., M. D.,
of New York City.

The following case would seem to be of special interest in a diagnostic and pathological point of view. It came under my observation during October, 1882.

H. M. P., mulatto, æt. 42 years, Connecticut, married. Had the usual diseases of childhood, with no sequelæ. At the age of eighteen years he commenced to earn his livelihood, and, at the same time, to imbibe of all kinds of alcoholic liquors to excess. This habit was continued till his twenty-seventh year, when, on marrying, he decreased his alcoholic libations to about one-third of the former quantity. Since then the amount taken daily has fluctuated between three and eight "drinks" daily. Has been addicted to excessive smoking since the age of sixteen.

In his twenty-fourth year he contracted what his shipmates told him was the "initial lesion" (no physician's opinion to be obtained, being upon the ocean on a long voyage at the time), which he cauterized with stick nitrate, and promptly healed. It, however, reopened two months later, remained unhealed for five or six months, when an eruption appeared upon the whole body, particularly localized about the joints. Character of eruption: Round blotches, red base, surmounted by white scales, on lifting which a dark red, elevated spot, of the size of a small lentil, appeared; discrete over the surface of the body, confluent at the joints. Intense itching.

On the appearance of this eruption he placed himself under the care of a regular physician of this city, who treated him for "secondary," although the patient had at no time (then or since)

adenopathy, buccal, pharyngeal, scalp, or any of the symptoms of syphilis, unless the eruption be so considered.

At the end of six months' treatment the eruption had disappeared, leaving pigmented spots, which did not disappear for four or five years. Patient continued taking this physician's medicine over a period of two years.

Family history good, excepting that of his brother, who was believed to have died from cancer of the groin, which penetrated to the deeper structures, causing death from hemorrhage; his mother died from uterine cancer.

Present Disease: Patient enjoyed health till about two years ago, when, as steward of a steamship plying between this port and Aspinwall, he was exposed to great wet and dampness during day and night, and his duties were laborious. Severe nasal catarrh first appeared, followed by bronchial catarrh, without dyspnœa. Cough, expectoration and pectoral distress fluctuated till the spring of 1881, when these symptoms began to improve, and during that summer he was nearly, although not wholly, free from them. There had been no loss of flesh, and only an occasional night-sweat.

In the following fall and winter the above symptoms became worse, a little ameliorated in the spring and summer again, but not as much so as the same season of the previous year.

In June, 1882, a peculiar dyspnœa was added to the other symptoms, being confined to inspiration. Constant in character, it was marked by paroxysms of severity in the morning and evening. It became especially aggravated during the first week in November. Since the appearance of this symptom, the patient could not assume the recumbent position, so perfectly terrible the dyspnœa became on attempting to do so. He slept in his chair, his head resting upon his arm placed upon the table in front of him. From three to five hours' sleep during the twenty-four was all he could obtain.

Curiously enough, up to the time he came under my observation, his general health had become but very little deteriorated,

his strength, appetite, etc., being good. Indeed, he did not abandon work, as a waiter, till five weeks previous (i. e., about Sept. 1, 1882).

Physical Examination: (Laryngoscopic)—Intense congestion of the mucous membrane of the epiglottis and larynx. No laryngeal ulcer, tumor, or stricture. (Auscultation and percussion)—Examination of the lungs was negative, except the sign of incomplete expansion of the right lung, and dry, harsh respiratory murmur throughout both lungs.

Cardiac apex beat strong, and about two and a half inches below and a little to the outside of a line drawn vertically through the nipple. Heart sounds normal, barring a certain amount of faintness. Dullness extended from the second intercostal space to about two inches below and a little outside of the nipple on the outer line; from the same level and right edge of the sternum to the same apex on the inner line; the upper line commenced at the right edge of the sternum, and was traced to nearly a point cut by a vertical line upward from the nipple. Over the sternum, on a level with the lower edge of the first rib downward for two inches, was a circumscribed area of absolute flatness.

Having made repeated stethoscopic examinations, I was able but once to detect a rough, rasping bruit over the normal location of the aortic arch.

No signs of diaphragmatic trouble, or of disease of the liver, spleen, or kidneys, could be found till a short time before his death, when albuminuria (mild) set in.

Although I was perfectly satisfied with my opinion, that the patient had never suffered from syphilis, and leaned greatly toward the diagnosis of aortic aneurism (more particularly after I had detected the above-mentioned bruit), I determined to give him (after a short trial of small doses of potassium iodide, strychnia, and quebracho) large doses of potassium iodide and minute doses of mercury, on the ground of giving him the benefit of the (serious) doubt regarding syphilis. I reasoned

that, whether syphilis or aneurism, the iodide should benefit him.

Accordingly, on Nov. 13, 1882, he began upon hydrarg. biniodid., gr. j; potassii iodid., $\mathfrak{z}\text{vj}$; ammon. chlorid., $\mathfrak{z}\text{ij}$; tr. opii camph., $f\mathfrak{z}\text{ss}$; aqua font., $f\mathfrak{z}\text{ij}$; syr. simp., ad $f\mathfrak{z}\text{vj}$. M. Sig: Dessertspoonful, diluted, after each meal. On Dec. 5th, I increased the potassium iodide to $\mathfrak{z}\text{jss}$ in the above prescription, these doses being continued daily for a couple of weeks more. At times during this treatment (which included almost constant and complete rest) the dyspnœa was somewhat improved, but not markedly so. After about six weeks' trial it was abandoned. Strychnia, in doses of gr. one-twelfth four times a day, gave no relief. Quebracho, even in large doses, was inert in this case. Infusion of digitalis, given to tolerance, gave little or no result.

Having candidly stated to the patient my inability to differentiate positively between aortic aneurism, cancerous mediastinal growth, and tracheal stricture, although I favored the diagnosis of aneurism, and informed him of the very serious nature of his condition, I advised him to see Drs. Geo. M. Lefferts and Clinton Wagner, to each of whom I sent a brief account of the patient's case, with my views thereon. Those gentlemen very carefully examined the patient (Dr. Wagner several times). Dr. Lefferts wrote me that his "diagnosis * * * is mediastinal tumor (aneurism of the arch) compressing trachea (I cannot see point of stenosis with the laryngoscope)." Dr. Wagner wrote: "I think the dyspnœa is caused by pressure from an intra-thoracic tumor, probably mediastinal. I do not think there is an aneurism of the aorta. An aneurism of the size sufficient to produce dyspnœa such as he has would surely press upon the recurrenents. He would then have paralysis of one or both vocal cords. His larynx and trachea are normal. I could detect no bruit." In a later communication he said: "I am sure we shall find a mediastinal tumor of some kind."

Let me here state that I had fully weighed the absence of signs of pressure upon the recurrences, and had favored the diagnosis of aortic aneurism despite the lack of this very important sign for three reasons: First, absence of syphilitic (according to my view) and traumatic history led me to eliminate tracheal stricture; second, absence of great loss of flesh and strength, of peculiar color of skin and countenance, and of adenopathy, militated seriously against cancer of mediastinum; third, I had undoubtedly heard a bruit over the arch.

The patient struggled heroically with his disease, which rapidly increased about the first of February of the present year, till death closed the scene and released him from terrible suffering (despite all justifiable means of palliation) on February 19th.

Post mortem held on the 20th by Drs. G. Fairfax Whiting and — Simpson, in my presence, disclosed a complete displacement of the heart downward and to the left, the normal space occupied by that organ being replaced by an apparently solid tumor, which, at the point corresponding to absolute dullness, was very firmly adherent to the sternum. It was also pretty firmly adherent to the surrounding tissues. There were evidences of old pleuritic adhesions. There was a peculiar circumscribed infiltration of the apex of the left lung of the size of a large English walnut. Dr. Whiting removed the heart and intimately attached tumor and the lungs for careful examination at home, and his subsequent report was as follows: "After taking the specimen home and dissecting the supposed tumor from its attachments to the heart and lungs, it was found to be an aneurism of the aorta. The entire cavity of the aneurism was filled up with laminated fibrine, leaving only the natural calibre of the artery open for the passage of the blood current, which condition accounts for there being no bruit present. There was considerable concentric hypertrophy of the walls of the left ventricle."

The autopsy was confined to the chest, the family being unwilling to allow a more complete one.

Believing this to have been an unique case of aortic aneurism of large size, and especially interesting structure, without the least sign of pressure upon the recurrent laryngeal nerves, I herewith submit it to the readers of the JOURNAL without further comment.

PYELO-NEPHRITIS CONSEQUENT UPON THE PRESENCE OF CALCULI AND OVER-DISTENTION OF THE BLADDER FOR
THREE WEEKS—TWENTY-ONE CALCULI
FOUND IN THE BLADDER.

REPORTED BY A. R. DAVIDSON, M. D.,

Professor of Medical Chemistry and Toxicology in Niagara University.

On the evening of September 23, 1883, I was called to attend C. J. F., age 58. The history of the case, as far as could be obtained, was as follows: For some years he had occasionally suffered with frequent desire to micturate, and some pain in the bladder, but these attacks were only occasional, and attributed by him to "catching cold." Three weeks previous to my first visit he had spent a week in Michigan, and upon his return had two chills, followed by fever which his physician pronounced to be malarial. Increased frequency of micturition followed (every half hour) and a continued fever, his strength failed rapidly, so that he was confined to bed, and according to his statement was treated assiduously for disease of the liver and lungs. Diabetes, it is said, was also suspected, on account of the large quantity of urine voided, it having become necessary for him, during the last four days, to arise every fifteen or twenty minutes to pass water, though the quantity passed was less than an ounce at each attempt. His physician was a Homœopath in large practice. Upon the day on which I was called to the case, a consultation had been held with a brother practitioner, and an attempt made to pass a catheter. After an hour's effort, it was

stated that one instrument had been introduced into the bladder, but no urine obtained. The poor fellow asserted that he had suffered untold tortures, and that he did not want any more attempts made to pass catheters upon him. An examination showed an apparently normal liver and healthy lungs, and also, as was expected, a large ovoid tumor in the abdomen, reaching nearly to the umbilicus. A finger introduced into the rectum showed, also, the presence of a very large and painful prostate. There was also a contracted meatus urinarius. At the urgent request of the patient, and fearing that some violence might have been used in previous attempts, the passage of a catheter was deferred until the following morning. Some of the urine was obtained, and an analysis in my laboratory yielded the following result:

Color, very pale, No. 1 Vogel.

Odor, ammoniacal.

Reaction, alkaline (from ammonia).

Specific gravity, 1.006.

Deposit, a little white, flocculent precipitate, easily diffused.

Urea, 1.6 grains to the ounce.

Albumen, about one-tenth of one per cent.

Sugar absent.

MICROSCOPICAL EXAMINATION.

Crystals of triple phosphate, much bladder epithelium, pus small in quantity, but many corpuscles having branched or tooth-like projections. Kidney epithelium very sparingly present, but much epithelial detritus.

The examination indicated that pyelitis existed, and, probably, from the very low proportion of urea, a suppurative, interstitial nephritis. Recognizing, therefore, the gravity of the case, I insisted upon a consultation, and Dr. Tremaine, U. S. A., was called in, and during the further progress of the case the patient had the advantage of his able counsel.

On the morning of the 24th I introduced a French Coodée Catheter, No. 17, F., without difficulty, although the prostatic

portion of the urethra was extremely sensitive. Three pints of ammoniacal urine was obtained. As the patient then complained of some pain, the catheter was withdrawn, leaving still a good deal of water in the bladder.

On the following morning the bladder was emptied. Such great pain followed, located by the patient in the glans penis, that I felt certain that a stone was present in the bladder. The contraction of the bladder on the enlarged prostate would not account for the severity of the pain. My inquiries for the ordinary symptoms of the presence of a calculus before he was taken sick were answered in the negative. Especially, he assured me that he has suffered no pain after making water, but rather before.*

In view of his great debility and the diseased condition of the kidneys, any operation was out of the question at the time, and therefore nothing was to be gained by an exploration of the bladder. It was thought, however, that a stone was detected by subsequent catheterization with a soft instrument. The urine was not again entirely withdrawn, and the patient, though very weak, was absolutely free from pain. Palpation over the region of the kidney caused some pain, notably on the left side. The urine became less ammoniacal, and polyuria ceased, but the amount of urea excreted did not increase. The tongue grew slowly more red, dry and contracted, the powers of life rapidly failed, the senses became impaired and he died October 1st.

The family of the deceased being people of intelligence and culture, my urgent request for a post mortem was granted. The result was interesting and instructive.

Kidneys. On cutting the ureters pus dropped freely from both. On section much pus was found in both pelves. In the pelvis of the left kidney were five phosphatic calculi, the largest the size of a white bean, their total weight being 0.900 grammes.

Bladder. On grasping the bladder the sensation was that of taking hold of a bag of marbles. Twenty-one calculi were

* The absence of this important symptom was undoubtedly due to the considerable amount of "residual urine" habitually present in the bladder.

found within, varying in size from a small hen's egg to a hickory nut; their total weight was 139.9 grammes. One of them sawed through showed a nucleus of uric acid; more than three-fourths of its diameter, externally, was composed of a uniform layer of phosphates, showing that there had been an uninterrupted deposit of triple phosphates, and this later growth was probably acquired during the time that his bladder was left filled with ammoniacal urine in his last sickness.

The coats of the bladder were thickened, the blood vessels dilated, but the mucus surface did not present the appearance of inflammation to any marked degree. Both lobes of the prostate gland were found to be enlarged, the median portion markedly so, and a small nipple-like projection upon it just filling the internal orifice of the urethra. The case is of peculiar interest, first in the large number of calculi of considerable size found in the bladder, and secondly in the indication of their very rapid growth. This is not so remarkable when we consider that the urine contains from two to four grains of phosphates in each ounce, and the large amount of it which was constantly present in the bladder. When urine is rendered alkaline by the formation of carbonate of ammonia, resulting from the decomposition of urea, not only is the phosphate of calcium precipitated (being soluble only in acid fluid, and not in alkaline ones), but it also forms, by the action of the ammonia on the phosphate of magnesia, always present in the urine, a triple phosphate of ammonio-magnesia phosphate. The case is different when the alkaline condition of the urine does not depend upon carbonate of ammonia, but on carbonate of potassium, sodium, or some other fixed alkali. Then no triple phosphate can form, and the sediment will consist only of phosphate of calcium. The calculi in the kidney were composed of large crystals of triple phosphates, loosely aggregated, so that they easily crumbled and were undoubtedly formed during the patient's last sickness. A recognition of the condition of the bladder two or three weeks previous to my first visit, with proper treatment of the case, would probably have prevented any involvement of the kidney.

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, October 2d, 1883.

President, Dr. John Cronyn, in the Chair. Dr. C. M. Daniels, Secretary.

Present—Drs. Hartwig, Brecht, Howe, Strong, Frank, Frederick, F. H. Potter, Grove, Long, Bartlett, Hubbell, Moody, Crego, Hayd, and, by invitation, Drs. Keene, Pohlman, Hinkle, Putnam, Webster, Hoyer, B. G. Long and Montgomery.

Essay by Dr. Eli H. Long; subject, "Prevention of Syphilis."

Discussion—Dr. Strong did not rise to discuss the essay, but to express his gratification on hearing it. Thought it valuable, and that it gave the subject in a compact way, although, in general, it was a broad one. The statistics seemed to support the desirability of some legislation on the subject. The argument sometimes raised, that it makes the evil a safe one, had a great deal in it, but if it made less of the evil in community, we must consider the necessity. Had thought, if it was purely a question of morality, it was not best to tamper with it.

Dr. Bartlett thought the subject an important one, especially the points referring to home teachings. He doubted if one father out of twenty ever talked with a son about it. Thought the cases were extremely pitiful, where the wife and children became infected through the dissipation of the husband, and in the efforts to subdue the evil and dangers, this should be considered and some other objections waived. Thought that proper legal restrictions might be desirable.

Dr. Crego did not approve of the ideas advanced, as he had had occasion to be personally familiar with some of the points suggested, where forced registration and examination of prostitutes was required. It seemed very degrading and only exhibited a hardened class; and hospital experience had shown that re-admission for venereal disease was common, and in European

cities where it had been tried, the system could be materially improved. Thought the question would be more than over-balanced by the number of youth led away, also that it was a great question and extremely hard to determine. As to arresting all street-walkers and inmates of houses of prostitution, who were diseased, and having them sent to hospitals, he estimated there would be ten times more than could be accommodated.

Dr. Hubbell thought it was a complex problem and involved so many questions that it hardly became him to discuss it.

Dr. Hartwig had not formed a very definite opinion. Thought the statistics not of sufficient accuracy to be depended upon; also, that the proposed legal steps would be an encroachment against the freedom of individuals, and that no one had a right to force another into a medical examination, and that laws in this respect ought not to exist. As to informing youth of the dangers, he thought the points of the paper well taken.

Dr. Grove considered it a question of universal importance. He thought that licensing would have but little control. Compared London and Vienna, saying that some streets of the former were most disgraceful, and that a gentleman would be accosted by street-walkers a dozen times while passing a short distance on certain streets, while in Vienna, such cases were rare. Thought the German regulations and restrictions far in advance of the English.

Dr. Pohlman agreed to every point in Dr. Long's paper. In comparing different countries, said that in the German army and navy the average was ten to twelve cases of venereal disease in 500 men; when the same men were transferred to England it was 120 to 500, and when they were in China a well man was the exception. Said that in some of the English mining districts the number of cases are surprising. As to informing the young men, etc., he doubted if one in ten would be influenced, although he believed in the home instruction; also, that as it was absolutely necessary to have the evil, that licensing was the only proper plan. It has been tried and found very successful.

Dr. Frederick believed it a good plan to try the licensing system, and make an attempt to govern it.

Dr. Strong wished to add, that, as a profession, we failed in our duty to instruct the public; believed we should promote the general welfare by so doing, and not be so much in reserve, and that a proper enlightenment would be of value and be properly appreciated.

Dr. Cronyn said the object was to present, very successfully and clearly, the subject that had occupied the minds of great men on the rostrum in Parliament for many years. From time immemorial all kinds of means had been tried to root it out like small-pox and other contagious diseases. The best evidence of the best mode was found in the essayist's comparisons of the various countries. It had been said in France that if English sailors could be kept from her ports, there would be no syphilis there. Prostitution must exist, as had been said by the best men of all times. In England, every year, it was getting nearer and nearer the French method. In Paris, no one need be bad unless he wanted to; but if certain information is desired, the hotel porter could no doubt give it if asked. As to licensing, he favored it, and thought whining morality had no leg to stand upon. As to the young men themselves, he thought soon as they were old enough they usually found out for themselves and needed but little instruction; and it was the experience of every medical man, that, when a patient gets the disease, he will invariably say: "*I will never do it again!*" But how often they return with the same complaint. This is a nation where we do as we please, and various callings are licensed according to law, and why not prostitution, and this for the purpose of protection; for if so many become affected now, what will become of us by and by. He thought the profession should urge the legislature to copy the French system.

Dr. Long, in closing, said he was much pleased at the interest manifested in the matter and the full discussion. He thought the subject a great one, and he avoided giving personal opinions,

preferring to leave it to the association. In referring to young men visiting houses, etc., the objection would seem less than the soliciting upon the streets or in clandestine prostitution. He thought the legislative action should be for the protection of the innocent.

Voluntary Communications—Dr. Crego related a case and gave in detail result of autopsy, showing cyst of brain; the specimen, which was very interesting, was shown.

Dr. Grove had noted the condition of eyes, and made ophthalmoscopic examination before death. Showed specimen of eye removed.

The matter was further discussed by Drs. Hayd, Bartlett, Cronyn and Crego.

Dr. Hartwig asked that members of the society make trials of opening abscesses, boils, etc., after applying carbolic acid in a line over point to be incised. He had once tried it and failed, but subsequently with perfect success.

Dr. Moody gave a detailed report of a case of congestive malarial fever, being very obscure at first and diagnosis extremely difficult. It would make an interesting subject for a clinical report.

Prevailing Diseases—Typhoid fever, dysentery, scarlet fever; also one case of cerebro-spinal meningitis reported.

Adjourned.

CLAYTON M. DANIELS, *Secretary*.

Correspondence.

Among the many letters which the Committee on Legislation of the Erie County Medical Society have received from prominent medical men in the State, cordially endorsing the proposed bill, we have been permitted to print one from Dr. Moore, which will be read with no little interest:

ROCHESTER, October 22, 1883.

DEAR DOCTOR—I have not been unmindful of the matter your committee have in hand, having been a sort of pioneer in the work. When I got my committee of the State Medical Society together ten years ago, and laid my plans before them to get a board in operation under the Regents, in hopes some day of enlarging their powers, I literally stood alone. But the law was passed, and I waited long for the fruits. It has now taken a new turn. While I have an instinctive dislike of any association with outsiders, it must be confessed that the plan your committee have in hand is the only one that can insure uniformity. Moreover, it is impossible to dictate anything on the subject of therapeutics. This, perhaps, is no great calamity if men are thoroughly informed in the other departments of medical knowledge.

If it is customary, and of this I cannot speak, to make a preamble to an act, I think this should be done, to show that the object is to strike at ignorance and not at any therapeutic faith.

Yours truly,

E. M. MOORE.

LYONS, October 18, 1883.

Editors Buffalo Medical and Surgical Journal:

DEAR DOCTORS—At the regular meeting of the Wayne County Medical Society, held on the 9th inst., a copy of the proposed bill for the purpose of establishing a State Medical Faculty, adopted by the Erie County Medical Society, was presented for consideration. Upon motion, it was—

Resolved, That we heartily endorse the bill proposed by the Erie County Medical Society, and that we use all lawful means to further its passage.

Resolved, That a committee of one in each assembly district be appointed to present the bill to our candidates for the assembly.

The President appointed as such committees: Eastern district, Dr. Darwin Colvin, of Clyde; Western district, Dr. C. G. Pomeroy, of Newark.

Very respectfully,

FLETCHER J. SHERMAN,
Secretary.

WHITE PLAINS, N. Y., Oct. 20, 1883.

Editors Buffalo Medical and Surgical Journal:

DEAR SIRS—Yours of the 18th is at hand. I presented the communication from Erie County Medical Society at the last meeting of Westchester County Medical Society, and also read the proposed bill which expresses in detail what was embraced in the resolutions of the society, passed at its annual meeting. The bill was endorsed by the society, and its strongest influence will be exerted to secure its passage. The President appointed Drs. Geo. J. Fisher and Wm. H. Helm as a committee to urge the passage of the bill.

Yours truly,

N. F. CURTIS,
Secretary.

The following circular, received by the Secretary of the Erie County Society, since its last meeting, gives the resolution and action of the society above referred to:

WHITE PLAINS, N. Y., Sept. 26, 1883.

Dr. A. M. Barker, Secretary of the Erie Co. Medical Society:

At the annual meeting of the Medical Society of the county of Westchester, in June last, the Board of Censors presented the following resolutions, which were adopted:

Resolved, That the representatives of this county in the State legislature be requested to urge the passage of an act to prohibit all medical colleges from granting diplomas, and requesting all candidates for the degree of Doctor in Medicine to ap-

pear before a State Board of Medical Examiners who shall recommend successful candidates to the Regents of the State University for a diploma.

Resolved, That the Secretary send a copy of this resolution to the members of the legislature from this county, and to every County Medical Society in the State, and urge them to take the same action.

We think this resolution expresses the universal sentiment of a profession crowded with those who have virtually bought their diplomas. Let us earnestly co-operate to obtain the desired legislation. Please inform me of the action of your society.

N. F. CURTIS, Secretary.

Selections.

SUDDEN DEATH FROM FRIGHT.

The following case appears worthy of being placed on record:

G. E. H——, aged seven years, the son of a sweep, had been witnessing a fight between two gipsy lads, when, as the contest became exciting, he suddenly fell backwards and was dead in a few moments. I was called in by the police immediately after death, and found the body, which was still warm, lying on its dorsal aspect on a soft patch of grass. The features had a placid expression, and his soot-smear'd face exhibited the traces of recent tears. It was stated that there was no one nearer to the boy when he fell than the two belligerents, who were about ten yards' distance.

The history which I elicited was as follows: The father had been a soldier in India and elsewhere for twenty-one years prior to taking up his present occupation, which he had followed for the last three months only. The mother had died suddenly a year ago, and was the subject of a coroner's inquest; but the cause of her death I have, in vain, tried to discover. The de-

ceased was an only son. His sister, aged four years, seems delicate, and I learn that his half-brother and sister are robust and healthy, and have no neurotic tendency. He was of a remarkably affectionate disposition, and was easily excited by the slightest unusual occurrences. The boy had had his dinner a quarter of an hour previous to death, and had kissed his father before leaving home as usual.

Agreeably to the coroner's order, I made an autopsy forty-eight hours after death. The body was plump, and the external aspect, on examination, showed no marks of injuries or contusions. Head: The dura mater was not adherent to the brain, neither was there any sign of fractures or effusions of fluid. The brain weighed forty-two ounces, was well formed, firm, and with convolutions and sulci well marked. The puncta vasculosa were a little more than ordinarily prominent. The several ganglia and ventricles of the brain were normal; minute examination betrayed no rupture of blood vessels or extravasations. The examination of spine showed no dislocation or other injury in the region of the atlas and dentata or elsewhere. The medulla oblongata and cord were apparently healthy. Chest: The right cavity showed a few old pleuritic adhesions; left pleura and cavity healthy. The lungs were normal, though a little gorged with blood; the pulmonary veins contained some fluid blood; the pericardium was healthy, and its secretion was of the normal color, quality and quantity; the right auricle was much distended, almost to bursting, with dark grumous fluid blood; the right ventricle was about one-third full of the same; the superior and inferior cava and hepatic veins were also much distended with dark fluid blood; the left auricle was full, but not so distended as the right; the left ventricle also contained a little fluid blood. The pulmonary veins were filled with fluid blood, and the two left veins terminated by a common opening in the left auricle. The heart's septum was normal, and its valves competent, and there was no evidence of rupture or disease. The liver was normal and healthy, the hepatic veins be-

ing filled. The kidneys were normal. The urinary bladder was half filled, and was perfectly healthy. There was no sign of injury to the abdominal walls. The diaphragm, peritoneum, spleen, pancreas, and supra-renal bodies were perfectly healthy and in their normal positions.

I gave my opinion at the inquest that death in this instance was due to strong emotion, the emotional impulse being transmitted from the brain to the cardio-inhibitory centre in the medulla, and thence along the inhibitory fibres of the vagus to the intra-cardiac ganglia, thus arresting the heart's action (in diastole). I proceeded to make the post mortem examination with a prejudiced mind that perhaps the death was due either to external violence on the head or pit of the stomach, or rupture of the heart or some blood vessel; but after a minute and patient examination, I found that I could only arrive at the opinion already given.—*J. E. Cooney, L. R. C. P., in The Lancet.*

DIPHtheria AND SCARLATINA.

The identity or not of the poisons producing diphtheria and scarlatina has been the subject of much discussion, and any information bearing upon the question is worthy of record. A curious instance of the manner in which these diseases at times coexist and alternate with each other is recorded in a report addressed by Mr. W. H. Power to the Local Government Board, and to which we refer elsewhere, on a prevalence of infectious diseases at Whitstable. Diphtheria commenced in Whitstable in October, 1880, and continued till January in the following year. It had not long prevailed when scarlatina appeared, the two diseases being concurrent and attacking at one time different members of the same family. The diphtheria then began to disappear, whilst the scarlatina became more prevalent and assumed an increasingly fatal type. Towards the middle of 1881 the scarlatina epidemic declined and diphtheria, at times

fatal, reappeared; indeed, with the absolute disappearance of scarlatina, diphtheria, early in 1882, steadily spread, remaining more or less prevalent throughout the year. During these several occurrences more than one of the medical practitioners in attendance on the cases had difficulty in diagnosing between the two diseases; thus cases of smart throat illness associated with distinct skin rash and altogether free from faucial false membrane occurred, and yet at no period of the illness or convalescence did any such tendency to desquamation, as usually follows on scarlatina, show itself. Eight or ten years ago very similar circumstances were observed at Whitstable, diphtheria being exceptionally fatal and at the same time associated with a prevalence of scarlatina. Mr. Power abstains from expressing any comment on the questions arising from a consideration of these circumstances; the facts are, however, highly interesting.—*The Lancet*.

THE VALUE OF ETHER IN COLLAPSE.

I gather from Mr. Caiger's letter in *The Lancet* of August 25th, that the value of ether in collapse is somewhat of a new discovery. I was not aware of the fact when I used it eighteen months ago in a severe case of flooding caused by placenta prævia, the particulars of which I append. I received a message from a fellow practitioner who was ill, asking me to attend a midwifery case for him. On arriving at the house, bag in hand, I found the woman on the bed in such a state that for a moment or two it was doubtful whether she was alive or dead. However, she was alive, and I immediately injected half a drachm of ether. Its effect was magical, so I gave another injection of the same quantity. After this ether and Bonjeau's ergotin were injected together into the buttock, this produced contraction of the uterus, and brought the head down to close the os, where it was maintained in position by abdominal pressure. Shortly

afterwards I turned and delivered, and the woman made an excellent and rapid recovery.—*Herbert H. Meyers, M. R. C. S., L. R. C. P., in The Lancet.*

CHOLERA AT ALLAHABAD.

A communication from India, bearing the date of August 5th, announces an outbreak of cholera in the Royal Artillery station at Allahabad. "During the last few days," observes our correspondent, "there have been twelve cases amongst the native servants of the regiment, and four deaths. Four Europeans have been attacked; one died, and three are under treatment, dangerously ill. No case has yet occurred in the 81st Foot, but two cases are reported to-day in the Native Infantry Regiment. The weather is much cooler than it has been for some months past; still the shade-temperature varies from 80° to 90° daily, and the percentage of humidity from 70 nearly to saturation."—*The British Medical Journal.*

Editorial.

PROFESSIONAL ADVERTISING. IS IT ETHICAL?

The profession have been guided in their relations with the public, not only by the code of medical ethics, but by the unwritten law, deeply impressed upon its individual members, and by long-established custom regarded with a reverence which amounts to a real conviction in their utility and necessity. Any attempt to parade individual skill or attainments before the public, through the secular press, has been wisely discountenanced, not only as opposed to ethical rules, but to the general sentiment of the profession. Our attention has been, of late, directed to reports of operations, flattering mention of professional skill, the introduction of new methods of surgical procedure, published in the daily press, evidently from the pen of one familiar with the use of technical terms. It is charitable to

suppose that an enthusiasm born of admiration of the new candidate for professional and public honors may have inspired the first laudatory notice given by the daily press, but a repetition of the same methods, in successive issues of the same paper, impresses us with the conclusion that there is a fixed method in the course of the new aspirant, which savors somewhat of professional advertising, to which, as journalists, we feel it our duty to call attention.

Our city in its commercial as well as in its professional interests has been wisely conservative, and as a consequence we are sensitive to innovations upon old-established customs. Those indoctrinated with the habits and methods of other sections may ignorantly endeavor to use the license, tolerated elsewhere, of tickling the popular ear through the columns of the daily press, and thus establish a reputation by methods which are used by charlatans, and long since discountenanced by the better sentiment of the profession in older communities. It matters not, however, what the motive has been, which has prompted this practice, in the special case under consideration. The question is presented, is it ethical or strictly professional to make use of the secular press to publish such statements in regard to operations and to portray special methods of surgical procedure? Looking beyond the fact itself, who is intended to be benefited by such a course? What do the public know of antiseptics in surgery, of skin grafting and other modern ideas in which the merest tyros in medicines are now instructed. Is there not rather a motive to parade the name of the surgeon before the community and thus strive to establish a reputation by objectionable devices. Would it not be more professional to trust to superior ability, and attainments, and skill, which are sure to bring success to the possessor in the course of time? Rushing into print may not be the surest way of rushing into practice, and it is not always prudent to violate the ethical sensibilities of the profession with a view to gain time or to hasten the ordinary course of human events.

We are inclined to regard with disfavor these imported ideas for the acquisition of fame, or reputation, or practice, for the reason that they are not in accordance with our notions of medical ethics. We submit the question if it is in good taste for the successor of Hamilton and Moore, as well as for the institution with which he is connected, to attempt to rival the World's Dispensary in heralding his skill or sounding the praises of the panaceas offered to rescue human life or to alleviate human suffering. The medical profession offers to its votaries a more respectable pathway to fame and success.

We do not judge of this matter in a narrow or prejudiced manner. As journalists we criticise only for the good of the profession, with a view to antagonize any effort for selfish ends which will drag it down to the level of charlatanry.

NOTE.—I desire to express my dissent from the above editorial, so far as it may seem to imply that the lecturer on surgery in the Buffalo Medical College was privy to the publication of the articles referred to. I can not believe that a gentleman, by birth and education could be so devoid of professional instinct. At the same time, I fully agree with my confreres that our duty as journalists will not permit us to ignore so gross a violation of professional ethics. It behooves the medical authorities of the Buffalo Medical College and Hospital to prevent the repetition of such a scandal. If their discipline is too lax to effect that, they must assume the responsibility for the results of their own weakness and inefficiency.

A. R. D.

PROGRESS OF THE PROPOSED STATE FACULTY BILL.

Our readers will be pleased to learn that the plan proposed by our county society for the establishment of a State Medical Faculty is receiving the hearty endorsement of the profession. Although our local society has taken the initiative in the case, it has only been to invite the co-operation of the entire profes-

sion, and there are already signs that this greatly-to-be desired co-operation is forthcoming. Copies of the proposed bill have been sent to the proper officers of each county medical society throughout the State, and in a few instances regular meetings have already been held, the matter duly presented, resolutions of endorsement adopted, and committees of co-operation appointed. Added to this, the general tone of criticism of the measure is most encouraging.

Under the head of correspondence we publish some communications received upon this subject; and we gladly avail ourselves of the opportunity to give editorial prominence to the tersely expressed opinions of an eminent member of the profession from the central portion of the State. We deem these earnest thoughts worthy of all prominence for the reason that they concisely and happily state the entire case. The correspondent writes:

"I have read the act to establish a State Faculty in Medicine, very carefully, and fully endorse it. From the opening of the code controversy, I have all the more heartily joined in the effort to conform our code to our State laws in respect to consultations, because I hoped and believed that it would drive our profession unanimously to the position of demanding of the legislature the establishment by law of one uniform, authoritative test of the proper qualifications to practice medicine, viz.: the ascertainment, by a competent board of examiners, of the possession of the requisite knowledge to be fit therefor. The questions of opinions, theories, judgments, skill, are personal, *ex necessitate*. But if there is any such thing as knowledge in our profession, this should be universal, and a lack of it should prevent a license to practice. So far as I have been able to discover the opinions of the members of our county society upon this proposed bill, we are unanimously in its favor. The proposition is the true and only harmonizer, and the most decisive mark of advancement. Its effect will be to clear up more rapidly the existing status, and to exercise a wholesome check

upon the swarming annually of such an unnecessary number as now from our multitudinous colleges."

This is but a type of many letters which the committee have received. The writer, it will be seen, is an advocate of the new code; but the most hopeful feature in the case, and one which is an augury of success, is that the learned and most distinguished members of the profession, irrespective of any party affiliation, give this movement their hearty support.* In witness of this, we call attention to the letter from the Nestor of the profession in Western New York, Prof. E. M. Moore. No man in the State or in the country has given the subject of medical education more thought than has this sagacious and eminent teacher, and we bespeak for his communication a careful perusal. Such letters, from such men, prove the truth of our statement while writing upon the subject in the last number of the *JOURNAL*, when we said that "our whole profession is seriously in earnest in this business, and willing, in many instances, to drop individual preferences rather than risk the chance of co-operating on the main question."

THE NIAGARA UNIVERSITY—MEDICAL DEPARTMENT.

This institution opened its first course of lectures at the Sisters of Charity Hospital, in this city, on the 10th of October, Prof. John Cronyn, the president of the faculty, delivering the introductory lecture. Notwithstanding the late issue to the profession of the announcements, and the higher standard of literary attainments required of its matriculants, the success of the new college exceeds the anticipation of its promoters, and is an augury that the profession are in earnest in their efforts for reform in the prevailing system of medical education.

The clinical advantages afforded by the large hospital now under the charge of the faculty of the college are ample, and the clinical instruction given the students under the guidance of the accomplished clinical professors are among the decided advantages the college offers to the profession for a thorough

medical education. The graded curriculum and the annual examinations required in passing to the higher classes furnish, also, additional safeguards, as well as increased advantages. It is the aim of the faculty to submit the candidates for graduation to an independent board of examiners, thus practically endorsing the principles on which the Board of State Examiners is based, of divorcing the teaching and licensing power, and thus securing an impartial test for the qualifications of those who aspire to possess the degree of Doctor of Medicine.

We take pleasure in placing before the profession the evidence of success of an enterprise which inaugurates in this city a step in the direction of higher medical education; and we feel confident that ample encouragement will be given to enable the faculty to place the college on the same assured foundation that has made Harvard and other schools such a source of power and strength.

The class the present session is not large, but is composed of students of excellent education and of earnest purpose. It is not the aim of the college to hold out inducements for the crowd. There are an abundance of opportunities elsewhere for cheap and easy medical education. The Niagara Medical College will give the students a thorough trial in all the branches laid down in its curriculum, and will send forth its graduates well equipped in practical details as well as in theoretical principles, so that the profession at large, and the public for whose benefit the profession labor, will realize the advantages of this and every other effort in the interests of higher medical education.

EDITORIAL NOTES.

THE COLLEGES AND THE LICENSING POWER.—The *New York Medical Journal* says that the Medical Society of the County of Westchester has lately taken the decided step of preparing a memorial addressed to the legislature, praying that body to take away from the medical colleges the power to grant licenses to practice, and practi-

cally to give that power to the Board of Regents of the University of the State of New York. Such action, of course, would reduce the colleges to mere teaching bodies. This would likewise be the result in case the bill drawn up by the Erie county society should become a law. From the fact that the Westchester society has addressed a communication on the subject to our own society, it may be inferred that concerted action on the part of the various county societies is to be attempted.

DR. BULKLEY will give a seventh course of lectures on "Diseases of the Skin," in the Pathological Amphitheatre of the New York Hospital, 7 West 15th street, Wednesday afternoons at 2.30 o'clock, commencing Wednesday, October 17, 1883. The lectures will be didactic and clinical in character, covering the entire subject of diseases of the skin (including syphilis) and will be freely illustrated by colored plates, photographs, life-sized models, the blackboard, and abundant clinical material. The pathology, differential diagnosis and treatment of diseases of the skin will be especially considered. The course will consist of twenty lectures and will be free to practitioners of medicine and medical students.

THE U. S. PHARMACOPEIA.—We are requested by the publishers, Messrs. Wm. Wood & Co., 56 and 58 Lafayette Place, New York, to announce that any person having purchased a copy of the U. S. Pharmacopœia of 1880, and desiring a list of the corrections since made therein, can procure the same by sending a two cent stamp to them.

A GOLD MEDAL TO W. H. SCHIEFFELIN & CO., OF NEW YORK.—We call attention to the following extract from the New York *Medical Record*, as an instance of a well-earned honor: "At the Holland International Exhibition, at Amsterdam, a Gold Medal has just been awarded to Messrs. W. H. Schieffelin & Co. for their Soluble Pills and Granules. This is a special distinction for their reliable preparations, as the award was made after a careful analysis of specimens of Messrs. Schieffelin's manufactures by prominent chemists."

WE call attention to the advertisement of Henry Herrmann, 322 E. Genesee street, who is a practical instrument maker, and also repairs and puts in order surgeons' and physicians' cases. We commend him to the profession for their patronage and convenience.

THE aggressiveness of American enterprise received a very striking illustration at the late International Pharmaceutical Exhibition held at Vienna, in the display of products from the laboratory of our energetic countrymen, Messrs. Parke, Davis & Co., of Detroit, Michigan. We notice in the reports as published in the domestic journals, and from the special correspondence of foreign journals, that this display, while exciting much interest from its scientific features, attracted more than ordinary notice from its artistic beauty and finish, among the non-professional visitors. This lay interest was, doubtless, largely due to the special attention given the display by the Emperor and the Archduke Karl Ludwig. These royal visitors manifested unusual interest in this exhibition of American taste, and took occasion to especially compliment the firm, through its representative, on its enterprise and skill. We congratulate Messrs. Parke, Davis & Co., on this distinguished recognition of the artistic excellence of their laboratory products. Their intrinsic worth needs no commendation from us; this has long been conceded by the profession. The gold medal awarded them by the Vienna Exhibition is but an endorsement of the esteem in which this scientific commercial house is held in this country, where it is best known.

Reviews.

The Collective Investigation of Diphtheria as Conducted by the Therapeutic Gazette, Detroit, Michigan, with Editorial Summary. By J. J. MULHERON, M. D. Detroit, Michigan: GEO. S. DAVIS, Medical Publisher, 1883.

This work aims to furnish the profession with the views and opinions and experience of a large number of medical men, obtained in answer to certain questions propounded to them in regard to diphtheria, its nature, treatment and prophylaxis. We endorse the methods taken by the publisher in securing the opinions of a large number of practitioners, and embodying them in a book, which he now introduces to the public, the con-

tents of which contain valuable data and statement in regard to this very serious disease, which will be of service to the profession. We notice that Dr. Gaillard, in his journal, criticizes the work and the methods taken to procure the facts therein set forth. We cannot endorse his criticism. We are in sympathy with this or any other like movement which disseminates information in regard to any of the zymotic diseases, which prevail so largely in this country.

The Physician's Daily Pocket Record, comprising a Visiting List, many useful Memoranda Tables, etc. By S. W. BUTLER, M. D. Eighteenth year. New and thoroughly revised edition, with metric posological table. Edited by D. G. BURTON, M. D. Philadelphia: Published at the office of the *Medical and Surgical Reporter*, 115 South Seventh street. 1883.

"Butler's List" is well known and a favorite with a goodly proportion of the profession. It has an excellent and useful table showing the normal and abnormal qualities of urine, with their significance and tests. In its arrangements it has some advantages over other lists. It is also very compact and portable.

What to do First in Accidents and Emergencies. A manual explaining the treatment of surgical and other injuries in the absence of the physician. By CHARLES W. DULLES, M. D. Second edition, revised and enlarged, with new illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1883.

This little work furnishes brief directions for resuscitating persons in such accidents as drowning; for the treatment of foreign bodies in the eye; fits or seizures; injuries to the brain; effects of heat; effects of cold; sprains; dislocations; fractures; wounds; railroad and machinery accidents; hemorrhage; transportation of injured persons; poisons; domestic emergencies, etc. The directions are simple and judicious, and the work is just such an one as should be in every household in which there is sense enough to send for the medical man to supplement the treatment here advised.

United States Salary List and the Civil Service Law, Rules and Regulations, with Specimen Examination Questions in the Custom House, Post Office, and Classified Departmental Service. HENRY N. COPP, Attorney and Counselor-at-Law, Washington, D. C. 1883.

The 160 pages of this book give a good deal of solid information. All the government salaries are given, from the President's \$50,000 to the postmaster with \$500. The specimen examination papers presented to candidates for admittance to the different departments of the civil service are interesting. We venture to say that three-fourths of the medical students at our many diploma mills could not answer the questions given to the candidate for the position of letter carrier. The book is a useful one for all young men and women who have not decided upon a calling in life. The government offers lucrative and honorable employment; and under the rules inaugurated by the civil service reform movement, the best qualified candidates are supposed to have the preference in all appointments.

Treatment of Diseases of Infancy and Childhood, with over four hundred formulæ and prescriptions, as exemplified in the services of Drs. Jacobs, Lewis, Smith, Alonzo Clark, Draper, Austin Flint, W. A. Hammond, W. L. Loomis, Guillard, Thomas, Leaming, Delafield, Agnew, Buckley, Leferts and many others, and in the hospitals of New York City. By CHARLES H. GOODWIN, M. D. New York: C. H. Goodwin, M. D., 245 West Fifty-third Street. 1883. Price \$2.50.

Something over a year ago, Dr. Goodwin published a volume on the treatment of diseases of the heart and lungs, and those of our readers who purchased it got the full value of their money, we are confident. The present volume is equally praiseworthy; it is arranged on the same plan, the practical therapeutic views of the several leading medical authorities of New York City being given; and that which, in their experience, has proved most valuable, the author has intelligently presented to his readers. We have no doubt the work will prove a useful one to the profession.

Chemistry: General Medical and Pharmaceutical. Including the Chemistry of the U. S. Pharmacopœia. A manual of the general principles of the science and their application in medicine and pharmacy. By JOHN ATTFIELD, F. R. S., M. D., Ph. D., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain. Fifth edition, specially revised by the author for America. Philadelphia: H. C. Lea's Son & Co. 1883.

This book has met with so signal a success as to place it beyond criticism. Within sixteen years the demand has called for ten large editions of this manual. In our opinion it is by far the best work for the use of medical students, as the laws and principles of the science of chemistry are elucidated and illustrated by that portion of chemistry in which the medical practitioner is directly interested. In this respect it is in happy contrast with the many works now offered to the profession, in which the illustrations and experiments given apparently ignore the abundance of material which has this direct relationship.

The Pathology and Treatment of Venereal Diseases. By FREEMAN J. BUMSTEAD, M. D., LL. D., late Professor of Venereal Diseases at the College of Physicians and Surgeons, New York, etc., and ROBERT W. TAYLOR, A. M., M. D., Professor of Venereal and Skin Diseases in the University of Vermont, President of the American Dermatological Association, etc. Fifth edition, revised and rewritten, with many additions by Dr. Taylor, with 139 wood-cuts and thirteen chromo-lithographic figures. Philadelphia: Henry C. Lea's Son & Co. 1883.

In answer to the numerous inquiries which come to us from students and practitioners as to the best work on venereal diseases, we have said: "If you can buy but one, get Bumstead." Our good opinion of the book is strengthened by a careful review of this last edition. Dr. Taylor has shown his ability and his intention to keep the book in the front rank with the many admirable works on venereal diseases now presented to the profession. Much new matter has been added relating to therapeutics. The subjects of the inoculation of animals with syphilis and the bacillus origin of the disease are fully discussed and a chapter on syphilis and marriage has been appended. The chromo-lithographic plates are a useful addition. The work

is on a level with our present knowledge in all particulars. It is eminently practical, well written, full of excellent counsel, and worthy of the same confidence and appreciation which the previous four editions have so markedly enjoyed.

Types of Insanity: An Illustrated Guide, with Physical Diagnosis of Mental Disease. By ALLEN McLANE HAMILTON, M. D., one of the physicians to the Insane Asylum of New York City and the Hudson River State Hospital for the Insane. New York: William Wood & Co., 56 and 58 Lafayette Place. 1883.

This work aims to present to the general practitioner, for whom it is especially written, in a simple form, "a few suggestions" that may prove useful in meeting cases of insanity in their practice. The various types of the disease are illustrated by plates drawn from instantaneous photographs, the subjects being selected from hundreds of patients and the cases typical. The author presents a clear introduction to the subject of insanity, and then devotes a chapter to the general appearance of the insane; a chapter on the condition of special organs, the eyes, the ears, the mouth, the teeth, the tongue, the nose, etc.; a chapter on the condition of the bodily functions, the circulation, the temperature and pulse variations, the skin and its appendages, muscular tonus, the reflexes, sensibility, the urinary secretion, menstruation; a chapter on the examination of patients, changes in dress and personal habits, the handwriting of the insane; a chapter on the commitment of the insane, with abstract of the laws of the various States.

The work contains plates illustrating typical cases of idiocy, imbecility, melancholia attonita, chronic melancholia, subacute mania, chronic mania, dementia, general paresis, affections of the ear and condition of the teeth in the insane.

It will be seen that the work supplies to the general practitioner a guide in the examination of insane patients, in the diagnosis of the various types of insanity, a guide which will be of great service now that insanity has become a frequent disease, for the exercise of his judgment and skill; and we think the enter-

prising publishers have not only chosen wisely in the selection of the author for the preparation of the work, but have succeeded admirably in presenting it in a form that will command the approval and patronage of the profession.

A Practical Treatise on the Medical and Surgical Uses of Electricity.

Including localized and general Faradization, localized and central Faradization, Franklinization, electrolyses and galvanic cautery. By GEORGE M. BEARD, M. D., and A. D. ROCKWELL. Fourth edition, revised by A. D. ROCKWELL, with nearly 200 illustrations. New York: Wm. Wood & Co., Publishers, 56 and 58 Lafayette Place. 1883.

This book is so well known that it is hardly necessary to do more than announce the appearance of a fourth edition. It has for years been the recognized guide in the department of which it treats, and to every physician who employs electricity in his practice (and who does not?) it is almost a necessity. Dr. Rockwell has, in many ways, improved the book by his last revision. It is now thoroughly up to the present knowledge in all the departments of its subject. Perhaps the most important of the new matter that has been introduced relates to the experience of the author in the treatment of extra uterine pregnancy. Formerly, as is well known, these cases resulted either in immediate death, through rupture of the distended tube, or in protracted suffering, with frequently a fatal ending, through the efforts of nature to rid itself of the foetal mass. By the agency of electricity, in the method fully described in this edition, this abnormality of pregnancy may be met and treated with comparatively little danger or suffering to the mother. Extra uterine pregnancy is doubtless more frequent than is generally supposed. It is of the greatest importance that every practitioner be on the alert for this condition in its earlier stages, and familiar with a method of treatment which has proved efficacious. Messrs. Wood & Co. have published the book in excellent form. It contains nearly 800 pages, and the illustrations are excellent and sufficiently numerous.

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THE TREATMENT OF LONG STANDING PLEURAL EFFUSION—
CARIES OF THE VERTEBRÆ WITH PHTHISIS—AN
EXAMPLE OF EXTREME EMACIATION.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNI-
VERSITY OF PENNSYLVANIA, MAY 19TH, 1883.

BY WILLIAM PEPPER, M. D., LL. D.

Professor of Clinical Medicine in the University of Pennsylvania.

REPORTED BY WILLIAM H. MORRISON, M. D.

GENTLEMEN—I again bring before you the colored man whom you saw two weeks ago. You will remember that he had a large effusion in the right pleural cavity which had lasted four months and was the result of an attack of acute pleurisy. The left chest was almost entirely filled by the liquid, the diaphragm was pushed downwards and the heart was pushed to the right so that its apex beat was felt under the sternum. I told you that we should try to remove this effusion by the process of absorption. Absorption of this liquid, of course, had to take place from the surface and through the vessels of the pleura, and upon the extent to which that surface and those vessels were changed would depend the ease or difficulty with which absorption would

occur. In a mild attack of acute pleurisy, the inflammation subsides, the congestion is relieved by the effusion and the fever passes away. If the patient is kept in bed, absorption takes place spontaneously and in a few weeks he is well. If the inflammation be more severe and attended by the formation of a large amount of plastic lymph, covering the vessels and the absorbent surface, the effuse serum will no more be absorbed than if it were in a leather bottle. It may remain serous, or from a renewal of the inflammation in the feebly organized membrane, become mixed with pus, which may remain for months or years. Between these two extremes there is every degree of capacity on the part of nature for the removal of pleural effusion. Hence, in making our prognosis in these cases, there is always an element of uncertainty, viz., the state of the pleura. If the liquid is purulent we cannot hope to have it absorbed; but so long as it remains serous we have a right to hope for its removal in this way. The question whether or not it will be absorbed will depend upon the state of the pleura, which cannot be determined by external examinations. The longer a case has lasted, the less is the chance of having it removed by nature, and the more reason is there to think that the state of the pleura will not admit of absorption. Too much time should not be wasted in endeavoring to promote absorption, but before resorting to aspiration the patient should be given a reasonable chance.

The best plans of treatment for chronic inflammatory hydrothorax seems to me to be one of the two following: In the first place, the use of free blistering to the surface of the chest by means of blisters six inches square, repeated every couple of weeks, and internally the administration of iodide of potassium and digitalis, to which may be added acetate of potassium in such doses as are readily tolerated by the system. If there is no fever, the patient may take moderate exercise and should have a light dry diet which will promote the absorption of the liquid.

The second plan of treatment is by the free sweating with *jaborandi* conjoined with rest and restricted diet.

I told you that in this case we should try the latter of these two plans. On entering the hospital two weeks ago he weighed 184 pounds; to-day he weighs 168 pounds; he has, therefore, lost 16 pounds in fourteen days. During one sweat, which lasted three hours, he lost two pounds in weight, which would indicate a loss of one quart of liquid. He was at first put on the use of small doses of *jaborandi*—sixteen drops thrice daily—his diet at the same time being restricted to four ounces of milk every two hours. This cut his weight down in one week ten pounds, but did not produce much effect upon the pleural effusion. This made me fear that the pleura was so thickened that the liquid could not be absorbed. Last week I determined to try the effect of a more vigorous impression of *jaborandi*. The milk was increased to six ounces every two hours and he was allowed a small piece of bread three times a day. During the past week he has received one drachm of the fluid extract of *jaborandi* every other day. As a result he has lost six pounds in weight. Between the *jaborandi* sweats he has gained in weight. I should state that the urine has been examined but contains no albumen nor tube-casts. Its specific gravity is 1018 and the quantity is from four to six pints per day.

It remains now to determine what effect this has had upon the pleural effusion. His breathing is much easier than it was last week, and he feels very comfortable. The heart's action is still rather rapid and weak. The apex beat has returned towards the left and is now at the left edge of the sternum. It is still an inch and a half too far to the right. There has been a considerable decrease in the height of the liquid. Dullness is now reached at the fifth rib. The stomach yields its tympany some distance above the border of the ribs, showing that the diaphragm has risen. At the last examination the diaphragm was pushed down, and the resonance of the stomach was below the border of the ribs. The height of the diaphragm is as important

as the upper line of dullness in determining the amount of effusion. The upper line of dullness may not be very high, and yet if the diaphragm be pushed, a large amount of liquid may be present.

There is good respiratory murmur to the level of the liquid. Below that it is feeble, distant and lost. There has been, then, during the past week, a marked reduction in the amount of the effusion. I think that at least a quart of fluid has been removed. This would equal two pounds, and the remaining of four pounds must have been due to loss of solid material.

It remains to determine what course of treatment shall be pursued to remove the rest of the effusion. I am disposed to suspend operations for a week and allow nature to do what she can. Having started the process of absorption, and having the vessels well drained, I shall put him on the use of iodide of potassium, giving five grains three times a day. I shall also allow him a more liberal diet, an egg at breakfast, meat at dinner, and bread and butter three times a day. If this does not remove the liquid, I shall return to the use of jaborandi, giving him one or two more free sweats, and if this is not successful, I shall aspirate. If at the end of the week I find that the effusion has diminished, I shall continue the treatment which I have suggested, but if the quantity of liquid has increased, I shall immediately aspirate.

In cases of this kind we have to consider whether we are justified in adopting the severe treatment which was pursued in this case instead of tapping. Even if tapping is adopted there is danger that the effusion will immediately re-accumulate; while by following the plan of treatment which was employed in this case, not only is the effusion removed, but the pleura is brought into a healthier condition and the liability to return is lessened. I think that in this case the treatment was entirely justifiable, but I do not think that we should carry it further at the present time.

CARIES OF THE VERTEBRÆ WITH PHTHISIS.

This man has been working in the gas house and exposed to great changes of temperature and to a malarial atmosphere. After working in the gas house and becoming very hot, he would go out into the night air, with nothing on but his drawers and shirt, and sleep on the ground. He began to suffer with severe pain over the right short ribs. This pain was made worse by exercise and exertion and by walking. He also had a cough and muco-purulent expectoration, but the pain was so bad that he did not refer to the cough when he first applied for relief.

At that time it was thought that the pain was due to intercostal neuralgia, the result of malaria, but it did not yield to quinia and arsenic. We then thought that it might result from a strain, but there was no history of any injury of that kind. The pain was paroxysmal in character and very much influenced by certain positions. It was much worse when he laid on his back or the left side, and the only way that he could sleep with comfort was on the right side. This mechanical feature of the pain was very well marked. When at last he spoke of the cough, we examined the lungs and found phthisis of the left upper lobe. There was solidification with some softening in this region. On stripping him, I found that the curvature of the spine was excessive. Although I cannot say that this curvature has taken place recently, yet it is so marked as to suggest, when taken in connection with the disease of the lung, and the persistent pain, that there may be some morbid condition of the anterior faces of the bodies of the vertebrae in the lower dorsal region. The diagnosis at which I arrived was that this man was suffering from incipient caries or subacute inflammation of the cartilages and periosteum of the bodies of the vertebrae, in the lower dorsal region, associated with phthisis of the left upper lobe of the lung. Ten days ago I applied the actual cautery at the level of the pain and had a plaster of Paris jacket applied. He states that the pain has been a great deal better, that he sleeps better and is able to walk better since it has been applied. Having

obtained so much benefit from the plaster of Paris jacket, I shall put him to the expense of having a rawhide jacket made, so that the treatment of the dorsal region by cauterization may be continued. The lesion in the lung is not advanced enough, nor advancing rapidly enough to make it otherwise than proper that we should try to give this man as much relief as possible; and I think it will pay him to have a jacket that he can wear all the time without renewing it every few months.

AN EXAMPLE OF EXTREME EMACIATION, THE RESULT OF SUCCESSIVE ATTACKS OF ACUTE DISEASE.

The next patient is a young girl who is brought from the country with the history of a series of severe illnesses which have caused great weakness and emaciation, which is now complicated by contraction of the lower limbs. The following is her history: L. L., age 14 years; a school girl; has never had any hard work to do, and has never been especially exposed. She was never very strong, and was troubled with a weak stomach. She would suffer from dyspepsia after the least indiscretion in diet, and was liable to attacks of sick headache. Two years ago she was in bed for six weeks with "a bad head and stomach." She has had the various specific diseases of childhood. Five months ago she had a severe attack of diphtheria, and to give you an idea of the severity of this form of diphtheria, I may state that she had a brother and sister die in the same house in which she was sick. While convalescing from diphtheria she was attacked with pneumonia of the lower lobe of the left lung. This made her very ill, and again reduced her extremely low. When she began to improve from the pneumonia, she got typhoid fever, and has gone through a long and tedious spell of this disease. She is now convalescing from this last disease.

Her present weight is forty-nine pounds; as she is of the average height for her age, I judge that she must have lost more than fifty per cent. of her whole weight. She has bed sores over the sacrum and over the left hip. The tendons

of the legs and of the fingers of the right hand are contracted, but there is no ankylosis. Her appetite is fair, the digestion good and the bowels regular. If she makes any exertion, she suffers from shortness of breath. She also has spells of dyspnoea. The lungs seem to be healthy. The pulse is rapid, but there is no cardiac murmur.

Dr. Wm. H. Hughes has examined the blood and reports that there are 3,500,000 red corpuscles in the cubic millimetre, instead of 5,000,000, as there should be. There is one white corpuscle to every 850 red. There is, therefore, decided anæmia. There are also a large number of imperfectly developed red globules.

The emaciation is extreme. Such a degree of emaciation is, fortunately, very rare. The skin is harsh and dry from neglect, as well as from the removal of the adipose tissue by absorption. The skin over the bony processes is drawn so tight and thin that it seems to be almost transparent. In places, there are bands in the derm, giving a cicatricial appearance to the skin. A little more and we should have had ulceration over the convexity of the knees. This is a result of bad nursing. The limbs have been allowed to remain in a flexed condition, the skin has become congested and inflamed, and the derm has been torn, giving rise to these bands of cicatricial tissue.

As a consequence of long disuse and atrophy of the muscles, contraction of the limbs has occurred, so that any attempt to extend the legs causes severe pain. All this might have been prevented, by a proper exercise of the parts during the patient's illness. This is a most valuable lesson to us of the importance of attending to these points during prolonged and exhausting sickness. We have now to deal with a condition which is almost as serious as any that she has passed through, and which will be longer, more tedious and more painful in its management.

Otherwise the child is very well. The tongue is clean; the appetite is good and the bowels regular. I show you the bed sore on the left hip. There is here a fungous ulcer, two inches in diameter, almost laying bare the trochanter.

The treatment of this case will require great patience and gentleness. In the first place, she must be carefully nourished. She will be given milk, eggs, meat, porridge, bread and butter, beer if she will drink it, if not, milk punch; oil will be rubbed into the skin twice a day; as the inunctions are made, there will be manipulation of the muscles and passive movements of the joint. If the contractions are not overcome by systematic massage and passive movements; we shall have a Stromeier splint applied, and by this means gradually and gently overcome the contraction. Nothing like violence or haste is allowable in a case of this kind. Such a course would immediately excite inflammation in these feeble tissues and ulceration would follow.

This treatment shall be carried out, and I hope, in a few weeks, to be able to show her to you greatly improved.

THE PREVENTION OF SYPHILIS.*

BY ELI H. LONG, M. D.

In considering the subject of the prevention of syphilis, we have before us a matter which is of interest, not only to the members of the medical profession and capable of being discussed by them, but one which is considered and discussed by educated minds in all of the various stations and pursuits of life. Aside from its being a matter of study to the physician, as is the lessening of any disease, it presents questions to the sanitarian, to the philanthropist, and to the moralist, more than does perhaps any other one subject that engages our attention. I have selected this subject for discussion this evening, not that I hope to add anything new to the much that has been said from the various standpoints, but because I consider the matter one of great importance to all, and believe the discussion of it to be a means of education toward devising methods for combating the evil, which time will doubtless show to be a public necessity.

In the preparation of this paper I am indebted to Dr. J. Wm. White of Philadelphia, from whose excellent and thorough dis-

* Read before the Buffalo Medical and Surgical Association, Tuesday evening, Oct. 2, 1883.

cussion of the matter, in an address to the Philadelphia County Medical Society, I have gleaned numerous interesting facts and also the bulk of the statistics that I present.

It is unnecessary to speak of the characteristics of the disease, for they are known by you all; therefore, they will be referred to only where necessary in order to complete or confirm thoughts expressed.

It is a fact which we note and are thankful for, that our civil government provides for our protection against invasions by cholera and like scourges from abroad, and seeks to limit the spread of epidemics at home; but we must deplore the fact that little or nothing is done to stay the progress of this prevalent malady, which, if does any, merits the name of "the scourge of humankind." We are glad that the thousands of dollars are being expended to remove our Hamburg canal nuisance, but we must be content to think with horror of its neighbor, the infected district, whose poison numbers annually many more victims than do the emanations from the former, to say nothing of it as a hot-bed of vice and immorality.

It is easy enough to make such comparisons, and to speculate that syphilis, the world over, carries more people to the grave than does cholera or many another dread disease, but to suggest a practicable remedy is a matter of greater difficulty. It is one of the problems of civilization, which time, experience and education must help us to solve. It is unfortunate that a disease which is the source of so much misery should be placed under seal, as it were, by the existing state of society, so that it is forbidden that it should be spoken about in respectable hearing, or discussed by the press, or alluded to by the platform and pulpit, as almost any other evil of like prevalence may be.

It is believed by those who have taken pains to gather statistics that at least two millions of our population of fifty millions are affected with syphilis in some one or more of its various phases. This would be an average of one in each twenty-five persons. The truth of these figures may, at first, be doubted by

those of us who may be unacquainted with hospital and dispensary practice, who have not the opportunity of observing the frequency of the disease as it occurs throughout the land; but any one studying the cases presented at the dispensaries and almshouses of our larger cities, cannot fail to notice the great number who are suffering from this disease.

History gives us no positive date of the first appearance of syphilis. It is supposed by some to have existed in the time of Moses and Job, 1520 B. C., and that later it was described by Hippocrates, 460 B. C., Galen, A. D. 130, and others. We have reliable history to the effect that it was very prevalent in Europe in the latter part of the fifteenth century, and in the sixteenth century it was recognized as being caused by a specific virus. Since then it has spread throughout the world, gaining entrance into the best society, afflicting alike the rich and poor, and becoming the life-long, dread companion of multitudes, to many of whom grim Death comes a welcome guest.

As to the increase of the disease, I am led to believe that a disease so easily communicated, so secret that the unsuspecting and innocent cannot know of its existence until brought into sad relationship with it, and withal, a disease unrestricted in its spread by sanitary or legislative measures, cannot fail to increase in a progressive ratio. Touching this question, I will quote from the writings of the late Mr. Acton in 1869, who says: "I doubt whether venereal complaints, although evidently more severe formerly, were ever more common than at present, or whether, since syphilis was first treated in hospitals, the large proportions here noticed, namely, two out of three out-patients at the Free Hospital, nearly one in two at St. Bartholomew's, one out of every three at the Dreadnought, one out of four in the army, one out of seven in the navy, at any former period suffered from venereal disease; and yet many believe the disease is declining. That such is not the case, if number be any criterion, must be admitted by all who weigh well the above statistics, and compare them with the statements met with in nearly all the books that have treated of syphilis."

It is plainly a difficult matter to obtain reliable statistics of this disease, of which many victims do not come under the observation of physicians, being treated by quacks and drug clerks. Therefore, from partial statistics it is necessary to estimate, in order to obtain an approximately correct result.

In the British navy, during 1879, in ports protected by laws one sailor in every thirty or thirty-five contracted syphilis. In ports not protected by law, one in every ten or twelve acquired the disease. In the United States navy one sailor in every twenty is infected each year; how many of the nineteen others already have it we cannot say. Dr. Sturgis, after a careful study, concludes that there are in New York City, at any one time, from sixty to seventy thousand venereal cases,—about one in every fifteen of its population. After comparing figures taken from dispensary and hospital reports and from the statistics for the mercantile marine, he submits calculations which would give the number of venereal cases as one in each fifteen inhabitants, and the cases of syphilis as one in each eighteen or nineteen. It is estimated that in Great Britain 1,652,000 persons are annually infected with syphilis. In Prussia the government has been active to lessen the spread of the disease, and in the Prussian army the number of venereal cases are reported to be only fifty-four per one thousand. In Northern Africa syphilis is very common, and it is reported that the majority of the negroes of Western Africa are sooner or later infected. At Cape Town, in 1868, in six months 1,865 persons furnished 315 cases of syphilis. These are a few of the many reports which go to show the prevalence of the disease throughout the world.

After considering the presence and extent of the disease, we naturally turn our attention to the causes; but as the very name of syphilis or venereal disease suggests to us the predominant, direct cause, we will not dwell upon *it*, but pass to the consideration of a more remote, but very prevalent causative influence which is—ignorance. Although in the great majority of cases the contraction of syphilis is the result of vicious con-

duct, there are still many instances, a sad chapter in the history of mankind, where the pure in life innocently receive the disease, and suffer therefrom the accompanying miseries, and oftentimes drag out a weary existence, suffering for the sins of others.

What can be sadder than to see a respectable married woman suffering with symptoms for which she is unable in anywise to account, but which, at a glance, are known to the physician whom she consults, to be secondary or tertiary symptoms of syphilis, which was innocently acquired from an immoral husband, whom she supposes to be true and virtuous? Who of us has not known of a woman shrinking from society because of deformity unaccountable to her, such as the loss of the palate or other bones of the face, the result of similar infection? Think of the woman suffering with syphilitic ulcers, or with severe nocturnal headaches, the cause of which you dare not reveal to her. Think of the number of innocent children born with hereditary syphilis, who are doomed to an early death or a miserable existence. Think of the numerous instances in which the disease is communicated by the kiss of affection, by the handling of infectious toys or clothing, by the instruments of the dentist, and in the case of children by means of syphilitic wet-nurse or servants.

We cannot doubt that to no small extent the spread of the disease is due to want of care, the result of ignorance, on the part of those already infected. If a man having the initial lesion understands the gravity of the disease he has contracted, the activity of the poison thereof, and the liability of infecting others and bestowing upon them the train of dire consequences, can we not believe that he will restrain his desires during the infectious period of the disease, rather than endanger the health and happiness of those for whom he possesses affection or regard? Will he not be more careful about his personal cleanliness, and in all his social intercourse avoid any possibility of communicating the disease to others? Doubtless there are persons so selfishly degraded and inhuman as to furnish excep-

tions to the above, but will it not apply to perhaps the majority?

It is an established rule in the history of venereal diseases that the primary inconvenience of the disease bears an inverse relation to its real gravity. Thus, gonorrhœa, ordinarily the most harmless of venereal diseases, causes the patient at first the most pain and inconvenience. Secondly, the venereal sore or chancroid causes less primary trouble, but gives rise to suppurating buboes, offers a chance for phagedenic sores, and, according to some good authorities, a possibility of constitutional infection. Lastly, the chancre, which appears to the ignorant patient of little significance, and which, in the case of filthy persons, especially women, may remain undiscovered, exemplifies the rule fully as you all know, being the herald of a disease most loathsome and terrible.

From this rule we can glean an explanation answering for much of the rapid spread of syphilis. Take for example a person ignorant in these matters who has the initial sore, small, hard, painless, and seemingly of little moment. From his view of the case he sees no necessity for seeking medical advice any more than he would for the presence of a sliver in his finger. As the sore causes him little inconvenience, he is not obliged to deny himself lustful indulgence, and he is apt thereby to infect others before the appearance of graver symptoms. Let us suppose that one of the persons infected by him be an ignorant, careless public woman. She may not be aware of the sore when it appears upon her, and especially not of its character. As her shameful business is a source of sustenance to her, she will doubtless continue therein through the primary and early part of the secondary stages, suffering for the sake of money the slight inconvenience she may feel, until induced or compelled by graver general symptoms to suspend her occupation and seek advice.

We cannot tell how many persons she may have infected during all of this time, but the number would probably reach its fives, or tens, or more. But let us suppose the number to

be five, and let them carry the virus their various ways, and communicate the disease to others, as would naturally occur, and I leave it to each one of you to multiply for yourselves the amount of disease and misery which might be inflicted upon the community and the world from this one source of infection. Is it not plain that, with wise restrictive measures and proper knowledge, instead of the unbridled liberty of ignorance, much of this evil might have been averted?

Perhaps the saddest part of this history would be the sufferings of the innocent and the transmission of the disease to the unborn.

This is indeed a woeful but true picture to gaze upon. And shall we allow the evil to grow, fostered by an ignorance which we can in a measure dispel? And shall we allow the lawless liberty that prevails to remain, a source of danger to the innocent and uninstructed, when we know that its restriction in other lands, by other nations, has been a boon to the people? It remains for us as guardians of the public health and sanitary instructors, to agitate the matter and to devise means to quench this ever-increasing and devouring evil.

In the consideration of means of prevention, I will first call your attention to the subject of education.

The true, unprejudiced philanthropist must deplore the present state of society and the family which clothes them superficially with the garment of false modesty, and prevents the dissemination of proper knowledge on many important topics. To a greater or lesser degree is *this* accountable for the gross ignorance upon the subject at hand.

It is plainly proper to avoid conversation relating entirely to sexual matters, between mere friends and acquaintances, upon the ground of modesty, and also because uncalled for; but concerning the dreadful disease under consideration, which from its *nature* possesses an interest to the entire community as a whole, and to the people individually, should rational conversation be considered an impropriety merely from the fact that its most frequent mode of transmission is through vicious and shameful conduct?

In the social world this existing state effectually bars the discussion of the matter by the press, the platform and the pulpit. Were it not far better for humanity, if our newspapers and journals contained sound articles instructing the public upon topics of vital importance, although savoring of a private nature, rather than teem with extended accounts of scandals, trials for seductions, murders, rapes, etc., written up in language especially designed to suit the popular mind? The latter class of reading cannot fail to beget in the minds of the sensual, the immature, and the curious, a most unwholesome literary taste, which destroys the relish for literature that tends to elevate and refine. The former class of reading, although calling forth some objections, would instruct the people in regard to facts of great importance to themselves. It would furnish knowledge which would be a safeguard to them against previously unknown dangers; knowledge that would enable them to conform more fully to the rules of health; and knowledge that doubtless would be a means of raising the standard of morality, and creating in the minds of the people an appreciation of the value of the advice and labors of scientific men for the good of the race.

Could not the platform be utilized to educate and mould public opinion in regard to this evil? Why not encourage the delivery of lectures by able men and women, to audiences exclusively of either sex? Much could be done in this way to counteract the false teaching of the pamphlets and lectures of quacks, which, with mercenary aims, are placed within easy reach of all, and in place would be furnished sound information, given with an honorable purpose.

Now, as to our duty personally as physicians, many are the opportunities afforded us to instruct. Those who look to us for care in sickness, gladly receive instruction as to means for maintaining health; and as guardians of health, are we not grossly neglecting our duty if we allow the spread of disease, when by timely instruction we may prevent it and all of the misery and pain that it brings? We can recommend the perusal of scien-

tific books upon special subjects, written for the people. Such books are gladly read, and with profit. We can instruct parents, that they in turn may instruct their children as to personal care, and as to the danger of intimacy with persons of questionable character. By such means children would receive the instruction from their rightful teachers.

In the family we find the most natural school existent. It is there we learn, not only reading and writing, but there are moulded the essential elements of our life. There is our character built up, and there we receive our first lessons in the joys and sorrows, blessings and duties, and virtues and follies of life, which fit us for our relations with the world in maturity. This all results largely from the precepts and examples of our most natural teachers, our parents, the foundation of whose interest for our welfare is laid in love. Who of us have listened to the counsels of a kind father without feeling that the motive thereof was a love that desired only good for us?

If, then, the home is the place of essential preparation for life and duty, we ought to look to it for aid in the spread of proper knowledge of a special character. Shall it not be proper, and even a duty, for fathers and mothers to instruct their sons and daughters in useful knowledge of a private nature? It would be far better for a son to learn from a confiding father the dangers, debasement and sinfulness of youthful abuses and indulgences, than from personal experience or association with impure companions. If only the dangers to health from indulgence were kindly represented, would it not be a guard to the virtue of many a young man? But much more would the confidence shown by the parent, and the appeal to true manliness, be incentives to purity of life with its freedom from the disease we are considering.

What applies to young men will equally apply to young women. Small chance do our sisters have of knowing the extent to which vice and immorality exist in society, and as well

the low character of many whom society compels them to associate with. Instead of a knowledge which would be to them safety, they must remain in an ignorance more or less dangerous, unless it is dispelled by the counsels of a sensible father or brother.

If parents and guardians would thus regard the health of the young in this particular, as well as their school and business interests, and add to their duties that of giving the needed instruction to that end, I think we could reasonably expect a decrease in venereal disease, with a decided rise in the standard of morality of youth.

Doubtless we will all agree that the object set forth in this section is most desirable, and perhaps many of you would endorse the means recommended for its attainment; at the same time we know that the difficulties in the way of their satisfactory operation are many. We have a public opinion, fostered largely by ignorance, to fight against. We find many parents not sufficiently intelligent or interested to do their part. We find among many a sad want of self-respect and cleanliness, which are conducive to health and morality.

We could not hope to attain to any appreciable result in a short time; but, evidently, if it is desirable to instruct the people, and mould public opinion, in order to the more effectual suppression of vice and immorality which beget disease, the place for such a move to begin is with the medical profession, the members of which are the most capable teachers. Let us interest ourselves in the matter, and by discussions in our meetings and in our journals let us seek to interest the profession at large, and going further, to enlist in our cause the liberal-minded men and women who appreciate the necessity of the work. Let us plant the seed by giving wholesome instruction to the heads of families of which we have the care, leaving it to grow and increase, believing that future generations may thereby be made better and happier.

We now pass to the consideration of another, a more direct and positive means of prevention of syphilis, viz., the legislative prevention.

The subject of legislative interference is one that has been under discussion for many years, and there have been many able men who have favored legislation, and many who have condemned it.

There have been preventive laws enacted in different countries, and also in parts of the United States, and perhaps many more proposed, and in most cases results most pleasing to the sanitarian have followed their adoption and enforcement.

In England the "Contagious Diseases Acts" were passed in 1865, providing for protection against venereal disease in the military and seaport towns, and were intended for the benefit of the soldiers and sailors. They provided that, upon sworn information of a superintendent of police that a prostitute was suffering from venereal disease, she was subjected to examination, and if found necessary, she was detained in a hospital for from three to nine months. These acts were since amended and made more effectual.

In France, legislation to this end is not limited to naval and military points, but extends to the whole civil population. In our own land there has been, in the past, a law in successful operation in St. Louis, which, after a time, was rendered extinct through the efforts of a class of moralists, who considered the law as nothing more than a means of licensing and encouraging prostitution. The law, when in force, gave authority to the board of health and police, for the registration of all prostitutes, for their periodical examination by physicians appointed for the purpose, and when found with venereal disease, for their isolation in the female hospital. The women were compelled to pay weekly a certain sum, which was used entirely for their benefit in helping to support their hospital.

In the discussion of the great questions pertaining to health and morality, like the one before us, we meet with such diversity of

opinion among the friends of humanity, that we are often perplexed to define the line of right thought and action.

There is a class of philanthropists whose minds are governed entirely by ideas of morality; who have their ideal of a moral community; an ideal so grand that they will never see its reality. Such men will give such scope to their strict ideas of morality, that they will ignore the necessities of the community as it exists. They will seek to elevate at a bound a lot of degraded human beings, to a moral status nigh to that of divinity; or, failing to do this, will leave them, perchance, in their depravity, without extending the hand of sympathy for fear of defilement. Such men will strictly condemn any plan for the suppression of vice and disease which will allow the least liberty demanded by the existing grade of civilization, or afford the least protection to the unfortunate beings who propagate vice, and who have been led to sin, oftentimes, through circumstances which entitle them to a measure of sympathy from their more fortunate fellow-beings.

There is another class of persons who take a broader view, and look to the demands of the people as we find them; who appreciate that many men are possessed of perverted consciences and a low degree of stability; that the animal passions are stronger in some persons than in others; that the majority of men live for the present enjoyment of life only, and that it is the lesser number who place themselves under restraint in the present life, and educate themselves to enjoy the future life. They see that the highest possible plane of morality to which they could at present elevate the masses, must fall far short of the high standard maintained by the most conscientious. They see the necessity of protecting the people from the ravages of this most terrible disease, although requiring for its accomplishment means that apparently savor slightly of sensual liberty.

With this latter class have originated the various laws for the prevention of syphilis, and, imperfect and objectionable as these laws may seem, are we not forced to believe with them, that

sooner or later such legislation will become a public necessity? Knowing men as we do, can we deny that prostitution is an evil, necessitated by the present immorality of the masses, and as such entitled to the protection that such laws would afford? Prostitution is plainly a guardian of virtue to the better classes of the people. Were it abolished, multiplied would be the cases of rape, seduction and secret prostitution. Many homes would be polluted that now are pure, and the abode of happiness. The passions of the degraded would find vent somewhere, and doubtless greater sorrow and danger to the unprotected would exist under such abolition than does at present. For example, Bayard Taylor writes concerning Stockholm: "It has been called the most licentious city in Europe, and I have no doubt, with perfect justice. Nearly one-half the registered births are illegitimate, to say nothing of the illegitimate children born in wedlock. I have never seen any place where licentiousness was so open and avowed, and yet where the slang of a sham morality was so prevalent. There are no houses of prostitution in Stockholm; the city would be scandalized at the idea of allowing such a thing. A few years ago two were established, and the fact was no sooner known than a virtuous mob arose and violently pulled them down." Another illustration: Since the Reformation, the city of Berlin has thrice attempted to abolish all such houses, in 1717, 1796 and 1845, and each time with harmful results. The following is from the official report of the last attempt:

"The licensed houses, twenty-six in number, were closed in opposition to the remonstrance of the police. Their three hundred inhabitants, as well as all other females without ostensible means of support, were banished. But unnatural offences, self-abuse, secret prostitution, and illegitimate births became so common, and syphilis so much more than ever severe and frequent, that Gen. Von Wrangel, who was in command of the troops stationed at that post, was induced to make a forcible appeal on behalf of the army's health, against the quasi improved

order of things. The number of females who had entered the venereal hospital had at this time risen thirty-three per cent., and that of males about thirty-one per cent."

The high tide of emigration to our country must remind us that our population is increasing, and that this influx is bringing us masses of ignorant people who need laws for their control and protection rather than moral suasion.

The principal arguments urged against legislative prevention are the following :

"That prostitution would thereby be legalized and encouraged."

"That there would be an increased patronage of houses of prostitution from the sense of security from infection that the laws would foster."

"That the periodical examination of the women would be degrading and improper."

The only means of satisfactorily proving or disproving the soundness of these objections, is by noting the results of the working of the laws where in force ; and to this end I will present a few of the many reports summarized by Dr. White in his report :

"In France, the proportion of venereal disease among the troops was only one-fourth of that found in the English army before the operation of the Contagious Diseases Acts in the latter country."

"In Paris, among the registered prostitutes, one in twenty-five has venereal disease ; among those who are unregistered, but under surveillance, one in four. In Bordeaux, the proportion of registered women found diseased has never exceeded 18 per 1,000 during the last eight years, while of clandestine prostitutes 350 to 500 in 1,000 were affected. Almost the same figures apply in Rotterdam."

"In Belgium and Prussia, since the State has undertaken the duty of regulation, the following facts have been noted and officially reported :

1. Clandestine prostitution has diminished.
2. The diseases have assumed a milder character, and the average period of stay in hospital has been correspondingly reduced.
3. Unregistered or clandestine prostitutes are affected most frequently, and with the severer forms of syphilis.
4. The average number of men in military service who acquire disease is much less.
5. The women exhibit a better sanitary condition, greater cleanliness and self-respect, than ever before, and many of them are annually reclaimed.
6. The form of disease most diminished or modified is that in which society in general is most concerned, namely, the syphilitic."

Concerning Asia, the Surgeon-General of the Navy is authority for stating: "The amount of venereal disease on the Asiatic station has fallen from 425.8 per 1,000 to 112.1 per 1,000,—a difference of 313.7 per 1,000, due to the examination of prostitutes practised at Hong Kong and in Japan, and the seclusion of infected women in lock hospitals."

In St. Louis, at the expiration of two years, the chief of police reported that the number of public women had uniformly decreased each year (46 per cent. in the first eight months); that soliciting upon the streets had been almost entirely discontinued; that a considerable number of women had been reclaimed; that private prostitution had been materially checked; that juvenile prostitution was almost wholly removed; that deaths among the registered women had largely decreased.

In Nashville, during 1863, 1864 and 1865, laws were adopted for the benefit of the troops stationed there, and the prostitutes were examined once every ten days. Col. Fletcher reports the following results:

1. The amount of venereal disease was markedly lessened.
2. The women who were at first rebellious, became quite reconciled to the system.

3. It was self-supporting, the fees paying the expenses of the hospital.

The following extracts from report of Commissioners of Metropolitan Police for 1880, published in the London *Lancet*, May 7, 1881, are interesting:

"The removals from the register are of great interest, and are thus classified. 927 left the district, 67 married, 262 entered homes, 629 returned to their friends, and 22 died. The mortality for the past five years has remained steadily at less than 6 per 1,000. The amount of obstruction to the acts on the part of the women themselves was so small that in only eleven cases was it necessary to apply to the magistrate for an order." "With regard to the work of reclamation, the beneficent value of which can scarcely be estimated, we find 93 young girls under eighteen, 86 women under thirty, and 7 above that age have been rescued from bad company and immoral places. Of these, 13 were under fifteen years of age. Besides these, 174 had commenced an immoral life, but abandoned it on being cautioned, and are therefore not registered. Of these, 4 were under fifteen and 45 under eighteen years of age."

In the face of such facts and figures, I have no desire to comment upon the propriety of such laws, nor upon the results of their enforcement, but will leave you to draw your own conclusions and form your own opinions concerning the subject presented. But in conclusion, turning slightly from my subject, I wish to express an opinion, that if any work within the scope of the philanthropist is deserving of our praise, it is the work of benefiting and reclaiming fallen women, many of whom dire necessity has driven to a life of shame. Such women deserve our sympathy, and as reports show that such work has been carried on successfully under the legal system, all must agree that at least in this particular the laws have been beneficial.

The establishment of lock hospitals, where these unfortunate women can receive treatment, is a humane provision that many of our cities lack. If we admit that prostitution is an evil neces-

sity of the age, then that evil will be best controlled by recognizing it as a necessity, and dealing with it intelligently upon sanitary and moral grounds.

As a closing paragraph, permit me to present a graphic picture from the pen of Mr. Lecky in his "History of European Morals." After a consideration of the causes of prostitution, he says: "Under these circumstances, there has arisen in society a figure which is certainly the most mournful, and in some respects the most awful, upon which the eye of the moralist can dwell. That unhappy being whose very name is a shame to speak,—who counterfeits with a cold heart the transports of affection, and submits herself as the passive instrument of lust,—who is scorned and insulted as the vilest of her sex, and doomed for the most part to disease and abject wretchedness and an early death,—appears in every age as the perpetual symbol of the degradation and the sinfulness of man. Herself the supreme type of vice, she is ultimately the most efficient guardian of virtue. But for her, the unchallenged purity of countless happy homes would be polluted, and not a few who, in the pride of their untempted chastity, think of her with an indignant shudder, would have known the agony of remorse and of despair. On that one degraded and ignoble form are concentrated the passions that might have filled the world with shame. She remains, while civilizations rise and fall, the eternal priestess of humanity, blasted for the sins of the people."

SOME INTERESTING AUTOPSIES.

BY FREDERICK PETERSON, M. D.

(Continued from September, October and November numbers of the Journal.)

With this number is brought to a close a record of some thirty or more post mortem examinations held this year presenting all of them points of unusual interest.

NO. 46—OLD AND RECENT APOPLEXY. CHRONIC MENINGITIS.

State Insane Asylum, June 1—John Miller, æt. 44, dead eleven hours; body emaciated; rigor mortis marked.

Head: Dura mater normal; arachnoid cavity contained some 80 ccm. serum; arachnoid and pia mater thickened, opaque and tough. Lateral ventricles much distended and enlarged; ependyma thickened. Left thalamus opticus appeared as if much swollen; left cerebral hemisphere seemed larger than right, especially in middle lobe. On cutting into optic thalamus found an old organized clot $3\frac{1}{2}$ cm. in length by 2 cm. in thickness, yellow, tough and encapsuled; brain substance about it hardened; at its side in the left middle cerebral lobe was a large almost fluid collection of blood, size of walnut.

Chest: Lungs everywhere strongly adherent to chest walls, œdematous and hypostatically congested. Heart and valves normal; aorta somewhat dilated and covered with atheromatous excrescences.

Abdomen: Spleen hard and small. Liver the same. Kidneys both of normal size, very hard; two cicatrices of large size in right kidney. Bladder normal. Stomach normal.

Diagnosis: Old apoplectic clot in left optic thalamus; recent one in left middle lobe of cerebrum; chronic meningitis; chronic hydrocephalus internus.

Remarks: The first apoplectic attack took place two months before death. Consequently the older clot had existed two months. There was paralysis of right side. The second and fatal apoplectic stroke was four days before death.

NO. 61—ENLARGED PROSTATE GLAND WITH UNUSUAL SEQUELÆ.

General Hospital, August 22—A. D. Palmer, male, æt. 72, dead one and one-quarter hours; body well nourished; no rigor mortis as yet; marked tympanitis of abdomen. Head not examined.

Chest: No adhesions of pleuræ; senile emphysema of both lungs, œdema at apices and hypostatic congestion at bases. Heart: small vegetation on one wing of mitral valve, and another on a lunula of aortic; myo-cardium slightly fatty; aorta somewhat dilated; general endarteritis deformans.

Abdomen: Spleen of normal size; capsule thickened and partly calcified. Liver softened and very fatty. Kidneys: both very fatty, a few cysts, soft and flabby; pyelitis; granular surface. Bladder pressed upward above pelvis by enormously swollen and distended rectum and sigmoid flexure; there was cystitis and a prostate gland as large as an apple, and of almost scirrhus consistence and appearance (no microscopic examination has as yet been made). The whole pelvis was filled by the œdematous and purulent cellular tissue about rectum and pelvic walls. The pelvic peritoneum was inflamed, and the cavity contained $\frac{1}{2}$ litre of fibrino-purulent fluid. The rectal walls were in places over 3 cm. in thickness, the internal diameter being about normal. Both rectum and S Romanum were black with congestion, and the mucosa was the seat of dysenteric inflammation. The cellulitis was so extensive that the buttocks externally had the look of being pressed downward and outward. Penis, urethra and scrotum normal. In stomach hundreds of hemorrhagic erosions. In the ileum about $\frac{1}{2}$ metre from the cœcum was a congenital diverticulum 6 cm. in length.

Diagnosis: Parenchymatous and interstitial nephritis; pyelitis. Senile emphysema. Gastritis chronica. Tumor prostatæ apparently cause of cystitis, rectal disease, pelvic cellulitis and peritonitis, by the great pressure, congestion and œdema it called forth.

NO. 63—ENDOCARDITIS WITH CONSEQUENT INFARCTIONS IN SPLEEN
AND KIDNEY.

General Hospital, Sept. 6—Oakley, male, æt. 50; dead four hours; body well built and well nourished; rigor mortis had begun; old scar at base of glans penis.

Head: Dura mater normal; pia and arachnoid also normal. Whole of brain structure to all appearances normal.

Chest: Old adhesions at apices of lungs; œdema of upper lobe left lung; hypostatic congestion of lower lobes of both;

three or four old calcified tubercles in apex left lung; some bronchitis. Heart: increased quantity of serum in pericardium; spots on Tardieu on pericardium viscerale; on both wings of mitral valve, auricular surface, large vegetations, fully 2 cm. diameter at base; one lunula of aortic valve calcified at base; extensive atheromatous disease of aorta.

Abdomen: Spleen enlarged; recent inflammation of its capsule; four large infarcts in its substance, one beginning to soften. Left kidney enlarged, soft, friable, flabby and with one clearly defined infarct, base $1\frac{3}{4}$ cm. in diameter. Right kidney the same, without infarction. Liver enlarged and very fatty. Ileum and stomach normal. Bladder distended with urine, but normal.

Diagnosis: Death from endocarditis and parenchymatous nephritis.

NO. 68—GANGRENE OF LUNGS. RUPTURE OF ERODED VESSEL AND SUDDEN DEATH FROM HEMORRHAGE INTO PLEURAL SAC.

State Insane Asylum, Sept. 27—James Euart, æt. 69; dead eight hours; body much emaciated.

Head not examined.

Chest: Left lung emphysematous; pleura normal. Right pleural cavity contained about one-half litre of dark fluid blood; right lung so strongly adherent behind that it was impossible to remove it; in upper lobe behind an opening through pleura into a gangrenous cavity 5 cm. in diameter; this contained blood; in lowest lobe behind another such cavity full of pus of most foul odor; this was encapsuled; in anterior part lowest lobe a spot 5 cm. in diameter with pneumonia undergoing gray softening. Heart: mitral valve slightly thickened at edges; aortic the same; pulmonary and tricuspid normal; heart small; myocardium fatty.

Abdomen: Spleen atrophied. Liver atrophied and fatty. Kidneys atrophied and granular. Bladder distended with urine but normal. Stomach normal. Between stomach and liver in

gastro-hepatic mesentery a nodular tumor, multilocular, of size of fist, containing clear serum, not connected with liver or stomach (an encysted dropsy of peritoneum).

Diagnosis: Immediate cause of death hemorrhage from an eroded vessel in a gangrenous cavity of the lung; this burst through the thinned pleura into the pleural cavity. Cause of gangrene a lobular pneumonia of some weeks' standing. Senile involution of all the viscera.

Remarks: This patient died suddenly while attempting to move a chair. The blood vessel must have ruptured at that moment.

NO. 69—FRACTURE OF BODY OF VERTEBRA PROMINENS. PATIENT LIVED ONE WEEK !

General Hospital, October 1—Albert Ryring, æt. 32, dead thirteen hours. Body well nourished; rigor mortis strongly marked.

Head: Round hole from trephine in vertex of calvarium; dolichocephalic; calvarium very thick. Superior longitudinal sinus normal; dura mater normal; arachnoid and pia normal in the greater portion; great congestion of vessels over lower and back part of membranes covering cerebrum and cerebellum, even extravasations and coagula about some of the vessels. Brain itself in every respect normal.

Chest: Larynx normal. Body of seventh vertebra crushed and dislocated slightly forwards, with fracture, also, of processes in each side. Left lung normal; right side, old adhesions of pleura. Heart and pericardium in every respect normal.

Abdomen: Spleen normal. Liver greatly congested, otherwise normal. Both kidneys congested, but otherwise normal. Bladder distended with urine, and mucosa inflamed (acute cystitis). Chronic gastritis. Some duodenitis, and also catarrh of ileum. Cæcum normal.

Diagnosis: Death from fracture and dislocation of vertebra prominens and consequent injury of spinal cord.

Remarks: This man lived one week! There was coma and motor paralysis of arms and legs, yet with sensibility of trunk and extremities. There was no deformity produced externally, hence the suspicion that the trouble was with the cranial bones, and the trephine was used. He had fallen a considerable distance, striking upon back of head, neck and shoulders.

Clinical Reports.

A CASE OF CERVICAL ABSCESS.

BY F. R. CAMPBELL, M. D.

The importance of the early incision of deep abscesses of the neck has been demonstrated in an able paper written by the late Dr. Lidell, of New York, and published in the *American Journal of the Medical Sciences* for October. In ten cases that he has collected, there were five deaths and five recoveries. Three of these deaths were due to asphyxia caused by œdema glottidis, one was due to septicæmia and one to hemorrhage. Of the five fatal cases, none were artificially opened, while of the five resulting favorably, all were opened before extensive burrowing had taken place, thus proving that these abscesses do not tend spontaneously to recovery. A case of cervical abscess occurred in my own practice which will serve to confirm the views taken by Dr. Lidell:

John C., aged 20, a lead worker, first noticed a hard lump, the size of a hickory nut, under angle of left jaw, October 18th. The swelling occasioned but little inconvenience, and he continued to work as usual until October 22d, when his throat became so sore that he was obliged to stay at home. The patient was seen by me October 25th, one week after the swelling was first observed. There was an indurated lump about two inches long in the submaxillary triangle, with considerable swelling of

the surrounding tissues. No fluctuation could be detected. Was unable to examine fauces, as the patient could not open his mouth. Temperature, 102° . Ordered hot flaxseed poultices, frequently renewed, and, as his tongue was coated and bowels constipated, gave calomel, gr. v, to be followed by Sal Rochelle.

October 26th, swelling increased, temperature 103° . A sharp-pointed bistourie was introduced into swelling, but only a trace of pus was discovered, and none flowed afterward when the opening was enlarged with a probe. Patient was taking, at this time, tinct. ferri chlorid., ℥ xx, every three hours.

October 27th, swelling increased, left eye nearly closed; there was a diffuse cellulitis, resembling erysipelas, extending from temple down to chest. Temperature, $104\frac{1}{2}^{\circ}$. Respiration 28, with considerable dyspnœa. Gave quinine, gr. xij, followed by five-grain doses of the same drug every four hours, alternating with the iron. Dr. Chas. Gay was called in consultation and made an incision where pus had been previously discovered by the aspirating needle. A small amount of sanious matter was evacuated, having an intensely fetid odor, but the swelling was not perceptibly reduced. A drainage tube was inserted and the opening washed out frequently with a hot solution of carbolic acid, 1 to 40.

October 30th, pus flowing freely; temperature 102° , and swelling reduced. Suppuration continued until November 3d. At this time a probe could be passed in the opening to mesial line of neck anteriorly and backward as far as the angle of the jaw. The patient continued to improve, and has made a good recovery.

From the symptoms attending this case it seems evident that a fatal termination would have rapidly ensued if the swelling had not been incised; and the importance of opening even before well-marked collections of pus can be detected is demonstrated.

A CASE OF OPIUM HABIT.

BY J. W. PUTNAM, M. D.

Last February J. W., married lawyer, thirty-four years old, presented himself at the General Hospital for treatment.

He gave the following history: Six years ago, while in Texas, he was attacked with dysentery which was treated with opium. He took the drug for some time before he knew what had eased his pain.

On learning that it was opium, he tried to discontinue its use. It was too late; it had already become one of the necessities of life. The history of the next six years is one of repeated trials to break the cursed habit. He would succeed in living without it for weeks, then a day of hard mental labor would leave him to toss all night on a sleepless pillow, arising in the morning weak and nervous, unable to do his day's work. "Then," he says, "I had to take opium to keep soul and body together."

This is his previous history, and to-day (Feb. 16th) he claims that he takes ten grains of morphine before breakfast and ten more on going to bed. His appetite is poor, his bowels move perhaps twice a week and he perspires but little. The tongue is dry and furred, skin rather yellow, pulse 88; temperature 98°; pupils not much contracted.

On questioning, patient says he is willing to do anything to be broken of this habit. I suggested to him the best way to stop was *to stop*. This he agreed to do, although he had taken ten grains sulph. morph. that morning. He was sent to the ward and ordered conc. tinct. avena sativa, ℥ xxx, every three hours, beef tea and capsicum at 11 A. M. and 4 P. M., in addition to the house diet.

Feb. 17th. Patient slept a little last night. He complains of a gnawing pain in his stomach, which he says is relieved about ten minutes after taking the avena sativa. His bowels moved twice to-day.

Feb. 18th. Slept three hours last night. To-day he feels weak and restless. Ordered whiskey, $\mathfrak{z}$ ss., every three hours, and doubled the dose of *avena* (*i. e.*, $\mathfrak{z}$ j). At 3 P. M. he suffered severe pain in bowels; has had diarrhœa all day; pulse 110, and weak. Ordered laudanum, $\mathfrak{z}$ ss., per rectum. In two hours pulse fell to 90, the diarrhœa was checked and patient was comfortable.

Feb. 19th. Slept well last night, and feels easy this morning; appetite better than yesterday. Continued the treatment of *avena* and whiskey. There is considerable diaphoresis.

Feb. 20th. Patient complains that the *avena sativa* does not satisfy him, that he does not sleep. To me he seems stronger than yesterday; he has no diarrhœa and perspires much less. The appetite is not so good. Ordered fluid ext. coca, $\mathfrak{z}$ j, every three hours, and pulv. arom., gr. xx, whenever he complained of the gnawing pain.

Feb. 22d. Passed a good night. Bowels moved twice yesterday. Appetite good to-day.

Feb. 28th. Stopped *avena*, coca, etc., and gave tinct. cinch. comp., a teaspoonful before meals, and tinct. ferri chlor., $\mathfrak{M}$ xx, after meals. He was also sent out with an attendant for exercise.

March 10th. Has been out every day this month, and his general appearance shows marked improvement. His walk is firmer, skin clearer and voice stronger. He sleeps well every night and his appetite improves steadily. He rarely complains of the gastric pain. A slight diarrhœa to-day, but it is easily checked with gallic acid, gr. x.

April 14th. Patient discharged. Recovered.

This case is of peculiar interest to me, as it shows the result of treatment by sudden withdrawal of the opium. From the date of admission, Feb. 16th, he had opium but once, on the 18th, and that, not because he craved or asked for the drug, but to check a severe diarrhœa. The *avena sativa* seemed, for a few days, to relieve the great distress in the stomach. The patient tells me that he never had taken anything which so

nearly supplied the place of opium. This statement is difficult to understand, as I have never attributed to it any property save that of a bitter.

To-day, nearly nine months since he was admitted to the hospital, I was fortunate enough to meet him on the street. He was a different man. He had gained twenty-five pounds in weight, did a full day's work (out of door employment), and slept soundly at night. He tells me, and I believe him, that he has no desire for opium, and that he never would touch it again.

Selections.

FISSURE OF THE ANUS.

The value and efficacy of iodoform in fissure of the anus will bring this remedy into general use in the treatment of this painful and heretofore incurable lesion, without operation by the knife or forcible rupture of the sphincter-ani muscle.

As in cases involving the greatest danger, so with fissure of the anus, if the trouble can be cured by simple means, without suffering to the patient, and in reasonably due time, the operation of cutting or forcible rupture is not justifiable, and both these means of radical cure must give way to the more simple, if such may exist. With the experience I have had in the use of the local application of iodoform in cases of fissure of the anus, I am encouraged to bring the value of this remedy to the notice of the profession in these cases. In their treatment with this remedy, the alvine evacuations should always be maintained in a soft condition, the bowels should never be allowed to become constipated or relaxed; the anus, and parts involved by the fissure, should be kept constantly clean and free from deposit and dry incrustations; and, with one or two evacuations a day, the case may be speedily cured by the local use of iodoform. It may be dusted, in very fine powder, upon and into the

fissured parts, or applied in the form of ointment or suppository. The application of the simple powders, if properly prepared, three or four times a day after each evacuation, and in the intervals, is often sufficient. In some cases, however, the undiluted powder—also thoroughly powdered—causes some pain. In such the iodoform may be mixed with powdered gum acacia, if a powder be preferred, or may be made into an ointment with vaseline, or suppository with the oil of theobroma. Balsam of Peru, carbolic acid and oil of peppermint, will moderate the intensity of the iodoform odor; but this can hardly be requisite for application in this situation. The application of the remedy may be followed by a little smarting, but soon after its use the sensibility of the parts becomes benumbed, and even defecation may go on without consciousness, so far as concerns the development of pain during or after the process. That this remedy, applied as above directed and indicated will cause complete unconsciousness of the act of defecation, I doubt; I have never witnessed such result in any case that has come under my notice, and still the benumbing influence of the remedy is decidedly potent. As in applications to the conjunctival surfaces of the eyelids, the first and most important factor in the successful and painless use of the remedy consists in the proper preparation of the powder. It should be made very fine, and not the smallest crystal be allowed to remain unpowdered. The neglect of this precaution when applied to the eye has caused the most painful inflammation of the ocular and palpebral conjunctiva, and, applied thus imperfectly powdered to the anus, would likewise cause intense suffering, and, as in eye-practice, would be abandoned and declared to be dangerous and valueless, if intelligence did not bring relief.—*Thos. Hayd, M. D., in Medical and Surgical Reporter.*

REMOVAL OF THE THYROID GLAND.

Extirpation of the enlarged thyroid gland has been, of late years, frequently practiced, and, on the whole, good results have

been obtained, thanks chiefly to the antiseptic system of dressing. Amongst the more important recent writers on this subject may be mentioned Professor J. L. and Dr. A. Reverdin, who have published in the *Revue Medicale de la Suisse Romande* (1883, Nos. 4, 5 and 6) an account of twenty-two extirpations of goitre performed by them on twenty-one patients, twelve of whom were women. These cases are interesting, not only on account of the good results obtained, but also, and chiefly, perhaps, because Messrs. Reverdin were able to examine their patients several years after the operation, and then discovered certain remarkable alterations of the general health, which will be mentioned below, and which had, it seems, escaped the attention of other operators. The following is a brief account of Messrs. Reverdin's paper: The size of the tumors varied from that of a hen's egg to that of an adult's head. Most of the tumors were parenchymatous, with or without cysts, and occupied more or less exactly the middle line; one sent a prolongation downwards behind the sternum. In seventeen cases, total extirpation was performed; once an enucleation was done, while the remaining were cases of partial extirpation. Of the twenty-two operations, two only were followed by death, which was caused, in one case, by dyspnœa and convulsions, and, in the other, by lobular pneumonia. On an average, the patients remained only sixteen days in the hospital after the operation, and, in ten cases, union by first intention was obtained.

Amongst the accidents which may accompany or follow the operation, Messrs. Reverdin mention hemorrhage, which is best prevented by securing the thyroid arteries as soon as possible; secondary hemorrhage occurred in two cases. Dyspnœa was sometimes present before the operation, and in several cases prevented the administration of chloroform. The same complication, and also dysphonia, aphonia and dysphagia, were often noticed after the operation, but generally disappeared after a short time. In three cases, tonic convulsions of the upper extremities appeared after the operation; in one of these cases

(mentioned above), they were accompanied by a severe attack of suffocation, and soon followed by death. In five patients, three of whom were men, a remarkable alteration of the general health showed itself some months after the extirpation of the thyroid gland. There were at first weakness and coldness of the limbs, then loss of appetite, slowness of speech, diminution of the memory and progressive anæmia, accompanied, in two cases, by a peculiar œdema, most marked in the face, and very analogous to that which occurs in myxœdema. These symptoms partially disappeared after about three years. They seem to show themselves only after total extirpation, and are produced, according to Messrs. Reverdin, by a lesion of vasomotor nerves, and by a mucoid infiltration of certain tissues, in consequence of the removal of the thyroid gland. These serious consequences, which have a remarkable analogy with cretinism on the one hand, and myxœdema on the other, must be taken into consideration in the prognosis. Nevertheless, extirpation (or, if possible, enucleation) ought to be performed, according to Messrs. Reverdin, when there are symptoms of imminent danger, such as attacks of suffocation, and also in cases of retrosternal or rapidly growing goitre, when the ordinary treatment has proved useless.—*British Medical Journal*.

DANGER OF GLAZED EARTHENWARE VESSELS.

M. Perusson, a chemist at Limoges, furnishes fresh evidence of the danger of using glazed earthenware vessels, inasmuch as the glaze frequently contains lead oxide, which becomes soluble in the presence of acids. M. Perusson cites the following instance: One hundred grammes of milk was left to ferment in a glazed receptacle, and twenty-two centigrammes of lead sulphate was removed from it. When the glaze becomes rugged, the interstices are filled with metallic and fermenting substances; thus the danger is increased. Such utensils should either not be used, or else submitted to the influence of the direct contact of flame, or, in other words, singed. This is the only method to render them harmless.—*British Medical Journal*.

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, November 6th, 1883.

President, Dr. John Cronyn, in the Chair. Dr. C. M. Daniels, Secretary.

Present—Drs. Bartlett, Heath, Frank, Weil, Howe, Brecht, Putnam, Burghardt, Rochester, Coakley, Hartwig, Potter, C. A. Ring, and, by invitation, Dr. Keene.

Motion to suspend reading minutes of last meeting carried.

Application for membership received from Dr. James W. Hunter, who was duly elected.

The essayist, Dr. Howe, stated that he had been unable to complete his paper on "Blindness with Albuminuria," which he had intended to present, but would substitute the subject of "Artificial Illumination."

The paper referred in detail to the various means of artificial light used, from the tallow candle to that of electricity, and of their relative value, power, action on the eyes, etc., presenting many interesting points from the more recent investigations.

Discussion—Dr. Hartwig said he was sorry the essayist did not examine the oxy-hydrogen light, as he believed it would be the light of the future.

Dr. Heath expressed his appreciation of the paper, and referred to the inferior gas we were at times obliged to use. He thought no improvement would occur so long as the gas companies practically controlled the inspectorships.

He thought that the relative value of the electric light was in favor of the Swan and Sawyer storage batteries, because the Edison required the engine to go constantly. Also, that the cause of the irregularity of the Brush light was from faulty machinery.

Dr. Cronyn considered the subject an important one to students, especially those who "burn the midnight oil," as long continued use of improper light was exceedingly injurious.

Dr. Bartlett asked as to the best position light should be in for the benefit of the eyes.

Dr. Howe, in reply to Dr. Hartwig's reference to oxy-hydrogen as being the best light, said it was without doubt excellent when we are able to get it. Referring to the electric light "storage batteries," as mentioned by Dr. Heath, he thought they were not yet sufficiently perfected to be practical. In reply to Dr. Bartlett, said it should be behind or at left side.

Voluntary Communications—Dr. Hartwig asked for the experiences of members in opening abscesses after applying carbolic acid over point to be incised, as spoken of at the last meeting. He stated he had tried it several times with perfect success, not causing the least pain.

Dr. Heath said he had tried it by painting a line of carbolic acid over point of incision, but without diminishing the sensibility in the least; consequently he could not endorse it.

Dr. Hartwig replied that the success depended upon the manner of applying the acid. It required but very little; should be applied slowly with some sharp-pointed instrument, as a knife, and not spread out, as would be the case where a brush was used.

Dr. Rochester said it occurred to him that the tissues would not heal readily afterward and might leave a scar.

Dr. Hartwig remarked that it was usually desirable, when opening abscesses, that the wound remain open some considerable time. Also, that in his experience no scar was observable.

Dr. Cronyn thought ever so little carbolic acid might give a good deal of trouble by absorption, and that there would be danger in putting it on the knife. Referred to case where a glycerine and carbolic acid solution put in ear caused great renal irritation, albumen being present for a week.

Dr. Rochester thought not so much danger would be expected from strong solutions as from weak ones.

Prevailing Diseases—Scarlet fever, which seemed epidemic. Considerable diphtheria and some chicken pox. Dr. Rochester had noticed that when the public schools opened in the fall, scarlet fever became much more prevalent.

Dr. Bartlett said it seemed as if the school buildings might be a source of disease in holding the poison. Suggested proper fumigation.

Dr. Coakley had noted a peculiar eruptive disease resembling herpes, and chicken pox.

Adjourned.

CLAYTON M. DANIELS, *Secretary*.

Editorial.

THE NEW MEDICAL BILL.

We are glad to be able to announce that the committee having this important act of the Erie County Society in charge are daily receiving evidence that the admirable provisions of the bill appeal to the common sense of the community, and is thereby receiving a cordial co-operation, both from the profession and the laity, as we anticipated. Dr. Morris' letter, as published in our last number, has called forth much favorable comment. The *New York Medical Journal*, in an editorial upon the bill, objects to allowing the Homœopaths two members and the Eclectics one, asserting that a representation of one to each of the sects would satisfy all the reasonable claims of each of these sections of the profession. It further says that "an outcry against the bill must be expected from a certain class of doctors—a class always willing to pose as victims to persecution; but they will oppose any reasonable bill, because being their only idea of liberty. Dealing with sensible men, as most of our legislators may be assumed to be, there ought to be little difficulty in showing the utter shallowness of the persecution plea." We do not agree with our contemporary as to the wisdom of its proposed change as to representation. "We do not ask for legislation in the interests of the medical profession, but for measures in the interests of the community;" and it is only right and justice that in seeking that we should show a disposition to give all legally qualified medical men all that they

can reasonably ask in their representation on the proposed Board: and if the Eclectics are entitled to one representative, then the Homœopaths can fairly claim two, and, as we know, will not be content with less. That point granted, there appears to be an almost unanimous feeling among the educated men in favor of the bill.

The committee have recently issued a memorial to the profession of the State of New York, which contains so many facts and arguments in favor of the bill that we reproduce its eleven propositions entire:

1. That the present system of licensing physicians does not command the respect and confidence of either the profession or the people.

2. That the cardinal defect in that system is the fact that diplomas of medical colleges are licenses to practice medicine.

3. That, as a general rule, medical colleges are private corporations, operated by, and in the interests of, a few individuals, whose personal and pecuniary interests—acting with the tendencies of competition—have brought about a state of affairs in which a diploma has practically ceased to furnish any reasonable presumption of respectable professional acquirement.

4. That the graduates from the medical schools of this country, during the year last past, were nearly four thousand in number (3,979), being more than the number graduated during the same period by all the medical schools of the whole British Empire, France, Austria and Germany combined.

5. That, as a result of this system, the country is overrun with unlearned, incompetent persons, holding licenses to practice medicine, to the serious degradation of the profession and the detriment of the public health and welfare.

6. That the existence of this evil has recently been recognized by the legislative authority of the States of Alabama, North Carolina, Illinois, Minnesota, Missouri and West Virginia, and the remedy applied by the establishment, in each of these commonwealths, of a single licensing body after the form and manner of the faculty which this act would create.

7. That this system of placing the licensing power in the hands of a body directly responsible to the people, and entirely independent of, and disconnected from the teaching bodies, is the one which prevails in almost every civilized country in the world.

8. That the object of this proposed law is to strike at ignorance and incompetency, but that it in no way interferes with freedom of opinion or individuality of doctrine.

9. That, if enacted, it will in no way interfere with any person now engaged in the lawful practice of medicine, inasmuch as it excludes all such persons from its operations.

10. That the proposed law involves the State in no expenditure of money, neither now nor hereafter.

11. That, inasmuch as the evil complained of in this memorial is conceded by all, save those interested in its perpetuation—and as the plan here proposed is now in successful operation in six different States—inasmuch as this plan will not disturb any person now engaged in the lawful practice of medicine, and as it works no wrong to any citizen of the State—inasmuch as it imposes no burdens upon the State treasury, and would be simply adopting the usage of other enlightened countries—and inasmuch as its sole object is to secure to the people the services of a worthy and efficient medical profession, in the belief that such services would promote the public health and public welfare—for these reasons and in the name and behalf of the Medical Society of the County of Erie, we ask your hearty co-operation in the effort to secure the passage of this measure.

It is highly expedient that the attention of each member of the legislature be suitably directed to these facts, and we hope that each one of our many readers in the State of New York will personally see to it that the representative of his section understands the provisions of the bill, and so be prepared to support it in spite of all the efforts which colleges and quacks may make to kill it.

TRAINING SCHOOLS FOR NURSES AND THEIR RESULTS.

Next in importance to the subject of the higher education of the medical profession, is that of a thoroughly trained body of nurses. This subject has been receiving special attention from the profession for the last decade, and in many of the large centres of population, schools for the training of women for the proper care of the sick have been organized and are in successful operation. Buffalo is not behind in this excellent work. The Training School for Nurses connected with the Buffalo General Hospital has been in successful operation for several years, carrying the blessings of skilled nursing to the profession at large and to the bed-side of the sick and dying. It is truly a philanthropic work, and is finding an appreciative greeting in the medical profession, who have had to labor against prejudice from within and ignorance without the sick chamber in their work to alleviate human suffering. We have had personal knowledge of the qualifications of the nurses sent forth from the Buffalo Training School, and can testify to the excellency of the care they bestow upon the sick, and the wise judgment they exercise in the absence of the medical attendant. We may truly say their presence is the source of relief from anxiety to the physician, and their employment is also a source of both safety and economy to the patient. We learn that the Training School is attended by a larger number of women now than ever before in its history, and we regard this fact as an auspicious one, indicating an appreciation of its good work on the part of the profession and the public.

PROFESSIONAL ADVERTISING.

The JOURNAL has received a communication from the Lecturer on Surgery at the Buffalo Medical College, disclaiming all responsibility for the objectionable advertising which drew forth our just stricture in the last number of the JOURNAL.

We are glad to learn that the authorities of the Buffalo Medical College have informed the students that they will not be permitted to report cases for the secular press.

We hope, therefore, that the profession of the city will not be again scandalized by the publication of highly colored reports of operations, etc., with the plain motive of parading the name of the surgeon before the community and thus striving to establish a reputation by objectionable devices. Our duty as journalists required us to censure such violation of the ethics of the profession with severity, but in doing so we disclaim any animosity or ill feeling towards the surgeon whom it was thus proposed to benefit. It was to us an unpleasant incident in our controversy with the college relative to the appointment of a surgeon to the hospital, that in our protest against the ignoring of the just claims of the surgeons of our own city, we were compelled to assume a position which has been, by some, construed as antagonistic to the new-comer.

We are heartily glad, therefore, to be able to publish his disclaimer as above, and we hope he will not further suffer from the ill-advised efforts of his friends to aid him in the attainment of professional reputation.

The authorities of the Buffalo Medical College also disclaim responsibility, asserting that they were unable to control their students. If this is so we repeat what we said in our last: it is a pitiful evidence of weakness and inefficiency. We believe, however, that they underrate their own abilities; but in any case, the profession will hold them responsible for such gross violation of professional ethics, as the publication in the daily papers of sensational reports of cases occurring in the clinics of the college and hospital, over which they are supposed to have control.

EDITORIAL NOTES.

THE Chicago correspondent of the Philadelphia *Medical Times* sends the following from the metropolis of the West :

"It is becoming fashionable in this city to advertise the operators and operations in surgery. Some invite the newspaper reporter to be present, others see to it that the paper is supplied with an entirely technical report of the case, and others go so far as to secure an announcement in advance, to be followed by an exhaustive description of the operation in which the usual statements are made to the effect that the operation has been performed but twice before and never till this time in this country. They usually close with the assurance that the *operator* and the patient are doing well. Last week the popular mind was considerably agitated in this manner over the ligation of the common carotid."

AFTER an absence of six months, occupied in traveling in Europe and the South, Dr. Van Peyma returns to assume, with this number of the JOURNAL, his share of editorial control and responsibility.

OLEATES. We call attention to the value of these new preparations in the treatment especially of cutaneous diseases. We have used those prepared by Parke, Davis & Co. and Schieffelin, with great satisfaction. Messrs. Shaver & Co. inform us that they keep in stock a full supply and also have received a large invoice of the true "Sapo Viridis" and "Liquor Carbonis Detergens," so highly commended in Duhring's and other works on skin diseases.

Reviews.

An Ethical Symposium, being a Series of Papers Concerning Medical Ethics and Etiquette from the Liberal Standpoint. By ALFRED C. POST, WILLIAM S. ELY, S. OAKLEY VANDERPOOL, LEWIS S. PILCHER, THOMAS HUN, WILLIAM C. WEY, JOHN ORDONAU, DANIEL B. ST. JOHN ROOSA, C. R. AGNEW, ABRAHAM JACOB and H. R. HOPKINS, with an appendix. New York: G. P. Putnam's Sons, 27 and 29 West Twenty-ninth St. 1883.

The preface states: "The object of this little book is to place before the reader the motives which induced a large number of medical men of the State of New York to dissent from some of the rules which have hitherto controlled and guided them in their intercourse with themselves and the public."

The work is published in the interests of the new code. The papers from the gentlemen whose names appear on the title page are other expositorys of the principles on which the advocates of a more liberal policy on ethical questions base their arguments. We commend the work to our readers.

Epitome of Skin Diseases, with Formulæ for Students and Practitioners.

By the late TILBURY FOX, M. D., F. R. C. P., and T. COLCOTT FOX, M. B., M. R. C. P. Third American edition by T. COLCOTT FOX, B. A., M. B., Physician for Diseases of the Skin to the Westminster Hospital, etc. Philadelphia: H. C. Lea's Son & Co. 1883.

As a manual for the student and as a book for ready reference to the practitioner this work has long been highly esteemed. The present edition has been completely revised and will be increasingly useful and acceptable. The classification of dermal diseases, adopted by the American Dermatological Association has been introduced. For students particularly who have not time to read the larger treatises of Duhring and other American authors, it is a most desirable work.

Students' Manual of Diseases of the Nose and Throat. A digest, descriptive of the more commonly seen diseases of the upper air tract, with the methods of their treatment. By J. M. W. KITCHEN, M. D., Assistant Surgeon Metropolitan Throat Hospital. New York: G. P. Putnam's Sons. 1883.

A small book of 124 pages, giving, however, an excellent resume of the subject. It contains what should be known by every graduate in medicine, but omits the rarer diseases of the upper air tract. The publishers have issued the book in a handsome form.

The Roller Bandage. By WILLIAM BARTON HOPKINS, M. D., Demonstrator of Surgery, University of Pennsylvania. With Seventy-three illustrations. Philadelphia: J. B. Lippincott & Co. 1883.

This is a little book of ninety-five pages. It gives a series of definitions and general rules for bandaging, and then proceeds to show how the various bandages are to be applied. Most of the books give elaborate directions for the application of band-

ages which are usually mystifying; but the author of this valuable little work has, by means of the excellent illustrations, presented the subject so clearly that the student can easily familiarize himself with the details, and with a little practice be able to apply any roller bandage in a workmanlike manner. We would heartily commend this book as the best on this special subject.

Gout, in its Protean Aspects By J. MILNER FOTHERGILL, M. D. Detroit, Michigan: George S. Davis, Publisher. 1883.

Whatever comes from the pen of Dr. Fothergill, on digestion and mal-assimilation, commands attention from the profession, as much from the research of which all his writings on medical subjects bear evidence, as from the practical manner with which he treats the subject in hand. The present work of 300 pages is another contribution on a subject which will be sure to interest a large number of professional readers. Gout, in its disguised forms, has puzzled many of our readers, and a solution of the problem, after various and almost futile attempts, has only been made through a recognition of the principles which are elucidated in the work before us.

We commend the book most heartily. Its perusal has given us much satisfaction, and we are sure the profession will appreciate it.

Chemistry. Inorganic and Organic, with Experiments. By CHARLES LOUDON BLOXAM, Professor of Chemistry in King's College, London; in the Department of Artillery Studies, Woolwich, etc. From the fifth and revised English edition. Philadelphia: H. C. Lea's Son & Co. 1883.

Bloxam's Chemistry is so well known, both to professional chemists and to medical men, that it is unnecessary to say anything in commendation of the work. The publishers have presented the fifth edition in a way to merit the highest praise. There are nearly three hundred illustrations; and in print, paper and binding, no more could be desired. We find that the accomplished author has made some few alterations in the

theoretical portion of the work. A table of atomic weights, arranged so as to indicate the quantivalence of the elementary bodies has been added, and the book is now fully abreast and in harmony with the latest established views. For its size it forms a remarkably complete compendium of chemistry and can hardly be surpassed in the simplicity and clearness of its explanation.

Report of the Commissioner of Education for the Year 1881. Washington: Government Printing Office. 1883.

In view of the vast amount of material contained in these ponderous reports, it is not surprising that they appear so late. The present one contains nearly 1,000 pages. We find in the following, relative to medical schools, that which is instructive, in view of the present agitation for the better control of medical education :

The schools of medicine, dentistry and pharmacy, number 126, and are attended by 14,536 students. The instructors are 1,746 in number. The schools of medicine are styled regular, eclectic, and homœopathic. The regular schools number 76, and have 1,243 instructors and 10,250 students, of whom 989 are graduate students. The grounds, buildings and apparatus of these schools are valued at \$2,208,470, and the receipts for last year from tuition and other fees were \$375,493. The productive funds are small, \$366,193; and the libraries are meagre, containing only 40,757 volumes. Eight eclectic schools have 80 instructors and 882 students; grounds, buildings and apparatus valued at \$230,500, and receipts from tuition and other fees, \$39,760. The homœopathic schools are 12, with 173 instructors and 1,285 students, \$244,000 in grounds, buildings and apparatus, and an income of \$39,224.

The subjects treated by the Commissioner in connection with these schools are courses preparatory to the study of medicine, entrance examinations, the prevalent form and amount of medical instruction, clinical instruction, graded courses, and the gratifying progress in medical education. The preparatory

courses of Cornell University, the University of Pennsylvania, and Johns Hopkins University are described. The subjects and extent of entrance examinations are stated. The average requirements for a medical degree are that the student shall study medicine under some competent physician three years, attending, meanwhile, two courses of lectures in distinct years, the latter course in the institution from which the degree is sought. Thirteen schools are said to have graded courses of instruction. The studies of the first year are usually anatomy, physiology, histology, chemistry, and, less frequently, materia medica. Those of the second year are pathology, theory and practice of medicine, therapeutics and obstetrics. Special departments of anatomy and chemistry and of clinical medicine and surgery occupy the student in a number of schools. The studies of the third year are theory and practice, therapeutics, and obstetrics continued, diseases of women and children, surgery, ophthalmology, otology, mental and nervous diseases, and occasionally dermatology, laryngology, and medical jurisprudence. Several quotations given show that substantial progress has been made recently in medical education.

The number of degrees of all classes conferred in course was 12,093; honorary, 535. They were distributed as follows: In letters, 4,035 in course, 185 honorary; in science, 1,167 in course, 14 honorary; in philosophy, 476 in course, 49 honorary; in art, 29 in course, 2 honorary; in theology, 312 degrees and diplomas in course, 171 honorary degrees; *in medicine*, 4,896 in course, 22 honorary; in law, 1,002 in course, 92 honorary. The Commissioner says: "As a means of maintaining the full significance of scholastic honors one of two conditions should be made a requisite for degrees: First, a special examination; second, extended research or other worthy achievement in the department of knowledge represented by the degree. Our leading institutions insist more and more upon these requirements, and the relative proportion of honorary degrees decreases from year to year."

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Original Communications.

THE SPONGE-TENT IN ITS PRACTICAL APPLICATION.*

BY MARCELL HARTWIG, M. D., Buffalo, N. Y.

The subject may seem stale, for it is forty years since Dr. Simpson first introduced the sponge-tent among the most important of our resources for diagnosis. Nevertheless, I consider the sponge-tent one of the most important inventions of practical medicine. Its use in utero is certainly most valuable; but for other purposes, likewise, it can be employed most advantageously, and with eminent success. Thus, as you know, Dr. Bartlett has used the tent successfully to stop bleeding from the nose. Probably most of his cases were dependent upon a relaxation of the tissue of the Schneiderian membrane; and by long-continued pressure the mucus membrane here, just as in the uterine cavity, becomes considerably changed in its nutrition, and in consequence thereof ceases to bleed. Another purpose which the sponge-tent admirably answers, is the dilatation of fistulæ, or to irritate them, so as to excite granulation, by anointing the tent with irritating salves. I have read of cases of fistulæ in ano which were cured in this manner. We shall

* Read before the Buffalo Medical and Surgical Association, Tuesday evening, Dec. 4, 1883.

mention other uses for the tent later on, but at present let us consider its principal application, its employment in the uterine cavity.

All important with the use of the tent here, as elsewhere, is strict antisepsis. This knowledge is not wanting; but the practical treatment of the sponges, as we find them in the market, is not at all what is desirable. The market offers (boastfully as always) carbolized, disinfected, compressed sponge-tents, without considering that carbolic acid is volatile, and that the surface, at all events, remains without disinfection, the less so because the buyers generally handle a great many of the tents, while they purchase a few only, until after a while the whole stock has been handled and looks grayish-black, so that one feels almost nauseous when he looks at them. Another kind is coated with wax or paraffine, and looks decidedly black. If both sponge and coating were carefully bleached, the appearance would, of course, be far more inviting. Two other objections attach themselves to the tents. At present the market offers for sale the finest sizes only in a bent shape, but though bent uteri generally need larger sizes, these cannot be had, the larger sizes being made in straight shape. Furthermore, most of the tents are made of the coarsest kind of sponge, and thus they possess a great deal of expansibility, but no resistance. Accordingly, they do not expand to more than one-fourth of their size when the uterus is at all rigid; the finest and most compact sponges would appear to be precisely good enough. Our instrument makers should take the hint. A third objection, the possibility to tear out the thread fastened to the sponge, has been ingeniously overcome by our lamented James P. White, by running a loop of wire, or piece of string, through its entire length. But such an occurrence, of tearing of the thread, may be avoided if the sponge is of good quality, and if we take sufficient time in withdrawing it, by pulling gently but at the same time very steadily for several minutes. Still, it is better to be on the safe side always, and hence to use White's tents.

But all these objections would lose much of their force, were the disinfection of the sponges thorough and reliable. In future, non-evaporating substances will have to be used, such as salicylic acid, five per cent.; iodoform, five per cent.; or bichloride of mercury, one-half per cent.

According to recent investigations, that, namely, the internal surface of the uterus, is always teeming with bacilli, we should always apply, even though the tent is well disinfected, a reliable antisepticum to its surface, in order not to press *living* bacilli into the tissue of the uterus itself. For this purpose I recommend dipping the tent into a ten per cent. solution of carbolyzed glycerine and then to roll it in powdered iodoform. The combination offers the advantage that it does not soften the sponge; and as to the glycerine, it has been shown to possess a valuable property in that it produces a profuse, watery secretion from the uterine cavity, and that it thus manifests a depletory action. This was pointed out and proven by the late Marion Sims, long the pride and founder of American gynecology. The iodoform has, on account of its slight solubility, the advantage of continuing antiseptic action for a greater length of time. To be sure, the introduction removes a great deal of the antiseptic, but *semper a liquid hæret*. Just on this account the sponge ought to be not only disinfected, but ought to contain a free disinfecting agent, ready for action. If the sponge is coated with wax or paraffine (gelatine, perhaps, is preferable) the coating, also, should contain an antisepticum. Sponges ought to be coated, because with a narrow uterine canal, such in which dilatation is so frequently necessary, the introduction is often not immediately possible, and the sponge is spoiled before introduced, unless it is coated. For this reason I generally begin with tupelo tents, since their introduction. They, too, should be disinfected, though they are not so liable to infect, and certainly never did in my hands. It is to be regretted that no bent tupelo can be had, and Tieman & Co. have recently informed me that they have not succeeded in making any as yet. Let us

hope that ere long they may succeed. But till then our own dexterity must help us to introduce a straight tent into a bent womb.

Another method of introducing tents is a preliminary, limited dilatation with steel instruments. But for a complete dilatation they all are unfit, according to my conviction; and were they not, this proceeding itself would be altogether reprehensible, being too rude. I have seen a nervous lady faint with a shriek from a free and easy introduction of a sound, when the button passed the inner mouth of the womb. I convinced myself twice, on this same lady, *experimenti causa* to a certain extent, of this intense sensitiveness of the internal os, which is always peculiarly irritable.

After a thin tupelo has been laying in utero for six hours, we can generally succeed to introduce a little thicker sponge-tent. It is always advisable to wash the uterine cavity with a three per cent. solution of carbolic acid, before a new tent is introduced. If a very wide dilatation is necessary, several sponges must finally be introduced at the same time. As a rule, a sponge ought not to be left in the uterus more than twelve hours, and all instruments, and the vagina, should be thoroughly disinfected. It was at one time proposed to disinfect the uterus at the very outset by washing its cavity, but this is not always possible, because the fluid cannot safely escape, even by suction. Many grave accidents have thus happened. Reversely, to be able to apply medicines to the uterine cavity, previous dilatation is often necessary.

INDICATIONS FOR THE USE OF THE SPONGE-TENTS, AND MY PERSONAL EXPERIENCE.

Time does not permit, on this occasion, to be exhaustive, or even to consider the literature of the subject; but I believe that I have made use of the sponge-tent in a sufficient number of cases to warrant giving my own observations, which may not be without interest. I shall speak especially of my unlucky

cases, because they are at all times far more instructive, though, unfortunately, so often suppressed.

The employment of the sponge-tent in gynecology may be divided, with more or less propriety, into its use as an explorative measure and into its use as a curative agent. As a means of curing, the tent is useful in destroying, by its continued pressure, the granular degeneration of the mucous membrane. It may be possible to cure flexions occasionally by means of the tent alone, but I do not know of such a case, though the straightening, in combination with the change of nutrition, looks promising. For the latter purpose alone, we occasionally use the tent in the chronic infarctus, and with more or less success. To destroy granulations and the concomitant leucorrhœa once proved grandly efficient in my hands. A lady, who had inherited from her mother a dysmenorrhœa membranacea, and who suffered since her nuptials from a very profuse (perhaps Noeggerath's) leucorrhœa, commenced to flow considerably during her menses, while the usual pains were still increasing. The leucorrhœa having persisted during four gestations, the everted mucus membrane of the os being highly reddened, pulpy and bleeding at the slightest touch, I supposed there were granulations on the inner surface, and proceeded with dilatation. Three tents were introduced into the uterus and allowed to remain twenty-four hours. The reflex and other phenomena were intense. Very often repeated vomiting and strong pains were only incompletely controlled by subcutaneous injections of morphia, but after removal of the last sponge the leucorrhœa of twenty years' standing was forever gone, and the menses became regular and painless. After three months some membranous pieces began, with some pain, to show again; but the leucorrhœa did not come again for years. Was my diagnosis of granulations correct or not? Who will deny it, or who could prove it beyond doubt?

In two other cases of dysmenorrhœa membranacea the effect was similar, but not as perfect; the leucorrhœa continued, to a

certain extent, but I did not succeed, in one of these cases, to introduce a second tent to the fundus, and had to stop.

In regard to straightening a bent uterus with the tent, I would add that certainly few cases would be adapted for it. When adhesions fasten the womb or where one wall is atrophied at the inner mouth, the tent must of necessity fail. But in cases of retroflexions from softness of the uterine tissue *post partum*, a tent, and lying on the abdomen, may show results yet.

With chronic uterine infarctus I have used the sponge twice. In both cases there existed laceratio ossis externi and enlargement of the womb by one-half of an inch, but they differed, as the second case was a plethoric lady with excessive menses, while the first was more delicate and had rather scanty monthlies. The initial result was satisfactory in both cases. The leucorrhœa diminished in both, but in both nothing was finally achieved. The result is the same as Fritsch gives in the *Ctbl. f. Gynecologie*, p. 28, 1883. Nevertheless, I entertain hopes that definite results will follow in some cases, because the nutritive changes, through the extensive dilatation, must be considerable. Absorption of the inflammatory thickening of the uterine wall ought to be excited, but practical experience, not theoretical considerations, will have to decide.

One momentum will have to be kept in view, a pathologico-anatomical and etiological diagnosis, not a mechanical one, as has been inaugurated by Sims' influence through his magnificent gift to the profession—his uterine surgery.

The second of the above-mentioned cases is not entirely cured yet, and perhaps never will be; but the interest of the case centres in a disagreeable change it assumed. The introduction of the first *bent* sponge was comparatively easy, though considerable antelexion existed; but the second *straight* sponge could not be entirely introduced, as in a case already mentioned, though I omitted to wash the uterine cavity purposely, in order not to give the uterus time to contract. Whether on this or

any other account, and though I had used all the disinfecting precautions mentioned above, the fact is, that forty-eight hours after the first introduction a fever set in. For three days it fluctuated between 101 and 103½, then it sank to 100, to 101, and continued, though the lady left the bed, and though she did not present any untoward symptoms beyond a little weakness and some of her old complaints, for three weeks. The closest examination did not reveal anything like para- or perimetritis, or the like. Where have we to place the cause of this fever? I cannot but think that somewhere the disinfecting precautions were at fault anyhow, but that the infection was so slight as to cause at least no perceptible parametritis, etc.

A very instructive case in regard to infection, in which to my great sorrow, no post mortem examination could be obtained, was that of a robust woman whose sterility I tried to cure by slitting the portio vaginalis, using as a dressing to the wound per chloride of iron and cotton dipped in glycerine, as Sims recommended.

The treatment was carried on at my office. On the fifth day I took it for granted that the wound would be in a condition non-susceptible to septic poison, because it was granulating; and hence removed the tampon. Already, on the next day, she became feverish, but I was summoned one day later. I found her with considerable fever, disinfected the uterine cavity and wound; but it nevertheless took three weeks until the fever subsided altogether. Here likewise it was impossible to find a local inflammation. She had been up and about her duties again and seemed to be well and cured of her trouble, when once more a fever began to set in. By and by, a chronic (apparently cheesy) pneumonia was diagnosed in right lower lobe, which, at the end of about two years, caused her death. Her womb had not troubled her any, and at the beginning of her pneumonic symptoms I was thinking of embolism. May be that she had inherited a taint from her father, whose history, however, is not known, or that her constitution was undermined by in-

dulgence in strong drinks; still, nobody would have suspected phthisis in her, and I could not help thinking that in this instance there was something anyhow in the *post hoc ergo propter hoc*, the more so, because a similar state of things occurred again to me, the development, namely, of cheesy pneumonia shortly after I had dilated a cervix with metallic dilators. I once saw pyæmia with embolism in the lungs after abortion, resembling in some respects these cases, although, of course, *toto coelo*, different in its pathogenesis. This case recovered. I would remark, in passing, that among my cases in which I incised the portio, there was one which commenced with a fever from the same cause as the above mentioned fatal one. But being called at the very beginning, I immediately suppressed the fever by means of thorough disinfection.

The question about uterine operations in connection with phthisis deserves closer study, all due respect being had for Koch's investigations.

Far oftener than for curative purposes, the tent is used as a means of diagnosis, and to enable us to operate in the inside of the uterus in non-pregnant and pregnant women, and after timely or untimely confinements. Here the tent often wins its best triumphs. Frequently we would be entirely unable to do anything really beneficial for our patients had we not the tent at our disposal. But the danger of infection should at all times be kept in mind. Do not use it when you can get at a diagnosis with simpler means, or where the disease is not of much importance; but if you do use it, do not omit any of the indicated precautions, whether they appear practical or theoretical. No thought can be more horrifying to the physician than to know positively that he has injured instead of done good, or where with due care he could have saved. And just here an insignificant negligence can make you pay dearly. My first case, in Berlin in 1873, has taught me a severe lesson. A lady, in the climacteric period, called on me, having a protracted menstruation, which lasted two months uninterruptedly. Being desirous

of finding the cause, other means having failed to detect it, I inserted one of those extremely rudely prepared tents then kept by our instrument dealers. They were, as far as my recollection goes, supplied with antiseptic precautions, but were without complete antiseptics. That the latter was incomplete was best proven by the effect. The lady became very sick and dismissed me. I afterwards learned from a colleague that she recovered after a parametritis of six or more weeks' duration. For a long time the recollection of the case caused my head to ache; for a long time the woman's pale, haggard face and reproachful eyes disturbed my nights' rest.

For a long time I abstained altogether from using the tent; but in the course of time, necessity forced me to employ it again.

One year later, in the country, I was called to see a woman who bled profusely post abortum. Ice in the vagina, vaginal medicated injections (hot injections were then unknown), ergotin, iron-chloride tampon, all failed, helping a short time only at best. My fear of seeing her bleed to death was greater than it would be to-day. I went back to the tent, my antisepsis was more stringent. Pasteur's and Lister's results had penetrated Germany deeper. I dilated, scraped with the sharp spoon, and the hemorrhage was at an end. Later on, I had a very similar case, in which I know that I did not forget to finish with a thorough syringing out of the womb with a four per cent. carbolic acid solution. In this case, the result was so perfect that a year afterward I had the pleasure of delivering the lady of a full-grown child. In cases in which the mouth of the womb is not patulous enough to allow of scraping it without previous dilatation, Fritsch recommends to scrape with an "ear-spoon," so as to avoid the tent. While recognizing the authority of Fritsch, I have my doubts whether cases, which require scraping, would yield *complete* results thereby. Besides, the diagnosis remains obscurer, as you cannot, as a matter of course, introduce the finger into the womb. Of late years, I have not had much opportunity of forcible treatment of those cases of

abortion, because the more I saw, the more I was convinced that a great deal of loss of blood could be borne innocuously, and thus I treated most of those cases where I would use forcible means formerly, on the expectant plan merely. Nature's efforts succeed remarkably well with the abortus as well as with retained placenta, in which the loss of blood would seem to lead to death, before nature has finished her work.

In regard to the cases of retained placenta after abortion, two essays recently appeared by Munde and Sweringen, which oppose each other diametrically. While Munde urges active proceedings, basing his argument on fifty cases, Sweringen rejects this advice *in toto*, and considers the expectant treatment the only proper course to pursue. Here, as elsewhere, the good lies in the *aurea mediocritas*, in the golden middle course; but where this course is, is by no means easy to say. Only a large experience and much study will teach us to find it. Probably, the most difficult decision lies with cases where sepsis of the placenta is already ushered in. For the most part, the mouth of the womb will be patulous enough for immediate scraping and disinfection, and that, according to my idea, would be the most proper proceeding. But what is to be done when peritonitis generalis is present already? "*Noli me tangere*," may be the correct rule in most cases, although I saw such a case end fatally with "don't touch me." It would be impossible to exert pressure upon the abdomen in such cases to steady the womb; for a woman who has general peritonitis cannot stand much pressure; but dilatation and scraping may sometimes be possible, because the peritonitis varies in intensity in different cases, and we can hold the uterus sufficiently steady per vaginam. For active proceeding, we can here adduce the general experience that the new introduction of septic poison into the blood ceases with the washing out of the womb, and that instead the antiseptic is absorbed, although, to be sure, not too energetically, after abortions occurring during the first three months. Thus we close the *pons et origo* of the sickness, while

the septic substances already in the circulation may yet be destroyed by the oxidizing power of the organism. After timely confinements in which no scraping was necessary, I have cured three cases of general peritonitis by means of this disinfecting process. Why should it not be possible after abortions? You will certainly have to see your patient early would you see her survive.

If, in such a case, the mouth of the womb should be closed, and the sponge-tent necessary to dilate ere you can, of course, scrape and disinfect the inside of the womb, what then?

I have, as yet, not had such a case, and should like to hear of one from our members, although it is rather improbable that such a case should occur, inasmuch as the septic process generally commences within three days post abortum, and keeps the uterus relaxed. At any rate, the sponge here would have easy work; nor would it need to lay long in the uterus. The effect of the sponge's squeezing septic substance into the wall of the womb would be compensated by the antisepticum applied to its surface.

I once had an ante-abortum case which ran a very bad course. Despite the fact that I had several cases in which I used the sponge with good results, some of those cases in which abortion was designedly induced, still I believe that there are better means than the sponge for this purpose. In the case just mentioned I yielded somewhat to the pressure brought to bear on me to hasten the abortion, though against my convictions, because I have become more and more convinced of the fact that the slower an abortion takes place the better will it be; the less likelihood of retained placenta. We should not, however, lay aside our convictions to any amount of earnest appeals to proceed actively and hurriedly, unless we see indications of imminent danger from flooding, or unless the thermometer indicates a rise of temperature. In this case the sponge was expelled with the ovum. Having removed everything, and while about to syringe out the womb, I was called away in great haste. The

consequence of this neglect was that after five days (probably so late because the sponge was well disinfected) fever manifested itself. Disinfection of the womb, quinine, etc., caused its disappearance in three weeks. There was not a very well defined parametritic tumor on the left side.

In cases of flooding from intra-uterine polypi, the tent has achieved its greatest triumphs. In such a case it actually saved the life of a woman who had bled nearly the year round. Her medical attendant was extremely despairing of the case as he requested me to see it in consultation. Active dilatation with three sponges, and forcible scraping out of several large and many small polypi, together with Routh's injection, gave the dying woman a new lease on life, and she still lives. But it took two months before she could go round about again, though no fever was present. At the time of the operation her pulse was wiry, her color like a sheet of paper, and her legs œdematous.

(I will give, in parenthesis, the formula of Routh's injection, and remark that it is far preferable to solutions of iron for purposes of injections into the womb, because it does not form any coagula, though it has great styptic properties. This is the formula :

R̄	Iodinii,	-	-	-	-	3i
	Potasii iodidi,	-	-	-	-	3ii
	Alcoholis,	-	-	-	-	3ii
	Aquæ,	-	-	-	-	3vi).

It is known that with the aid of the tent intra-mural polypi can often be enucleated. Thus far, no such case has occurred to me.

Let me briefly mention yet a few other indications in which I would use the sponge-tent. I take the liberty to propose its use for dilating the œsophagus. The treatment must be gentler than when sounds are used. I would take a tupelo or gelatine-coated tent, tapering to both ends, and fastened to a long, strong thread. Draw the thread through an œsophageal sound, the rounded end of which is cut off. With the thread in tension,

the tent would stay partly in the tube, and so could be guided with it. Having gotten it well between the constricting parts, withdraw the sound and leave the thread hang out of the patient's mouth.

In a similar manner strictures of the urethra and of the rectum could perhaps be dilated, and with greater advantage than by the methods now in vogue.

Since writing this, Prof. Bergmann has dilated with the tent an œsophageal stricture from the stomach side, after gastrostomy.

P. S.—In the discussion of this paper by the society, it was mentioned that the tupelo-tents ought to be used almost exclusively, just because of the dangers of the sponge-tent, as set forth in this article. The author replied, in summing up, that this was precisely what he meant; the very intention of the paper being to put the medical public once again on their guard in respect to sponge-tents, although he did not mention the many cases in which he used the sponge-tent without any cause for complaint. With tupelos, he did not have, so far, any untoward accidents either, but his experience with them is very moderate yet.

M. H.

Selections.

AXIS-TRACTION FORCEPS.

Two years and a half have passed since I read a communication on Axis-Traction Forceps. I applied this designation to the forceps invented by M. Tarnier, or such modifications of them as I ventured to commend to the use of my fellow-practitioners. Their essential feature consists in their having traction-rods joined to the proximal end of the blades, and curving backwards towards a transverse bar which serves as the traction-handle of the instrument. The attachment of rods to the blades allows of direct traction on the head in their embrace. The

backward compensation curve (perineal curve, it is sometimes called) of the rods allows of the traction by a curved instrument through a curved canal without loss of power, and without misdirection of force. The jointing of the rods allows the advancing head to move the application handles in the constantly-changing direction along which it is traveling; and the direction

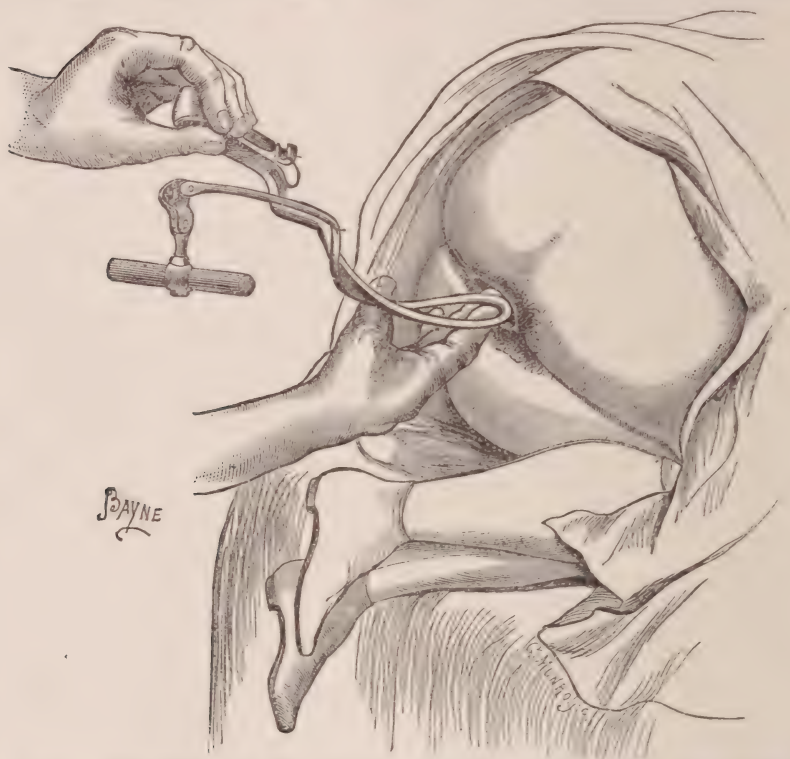


FIG. 1.—Application of the first or left half of forceps, with traction-rod and traction-handle permanently attached.

of the application handles thus furnishes the operator with an unerring index to the proper line of traction.

Dr. Albert Smith alleges that the Tarnier instrument is only a resuscitation of the disused apparatus of Hermann of Berne. Hermann saw and indicated very forcibly the difficulty of extracting the head with a curved instrument through a curved

canal. He felt the necessity of correcting the loss and misdirection of the power that results from traction through the handles, by making pressure in the neighborhood of the lock from the front (above, if the woman be on her back), or by

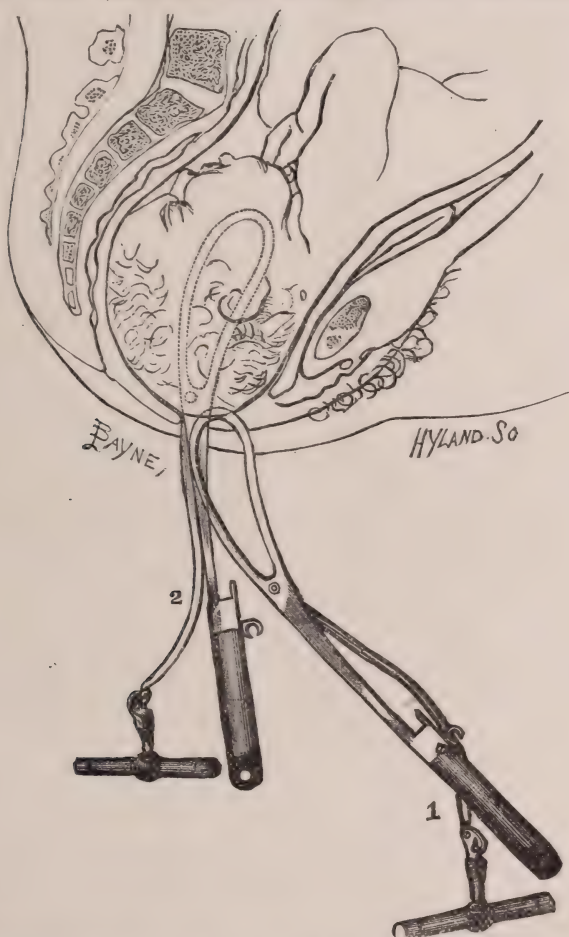


FIG. 2.—Introduction and adaptation of the first or left half of axis-traction forceps. 1 shows the traction-rod pushed in front of the shank during the process of introduction. 2 shows the traction-rod restored to its position when the blade has been adapted.

dragging on the lock from behind (below, if the woman be in the dorsal decubitus). To correct this loss and misdirection of power, one practitioner would rest the end of the long handles of the forceps on his shoulder while making traction with both

hands clasped round the lock. Another would drag on the handles, and press with his knee upon the lock. I have seen an obstetrician who had committed the traction to two assistants pulling by the hooks at the handle-ends, himself with his hands clasped round the lock close to the vulva, pulling in a backward direction. I remember assisting Dr. Kirk nearly thirty years

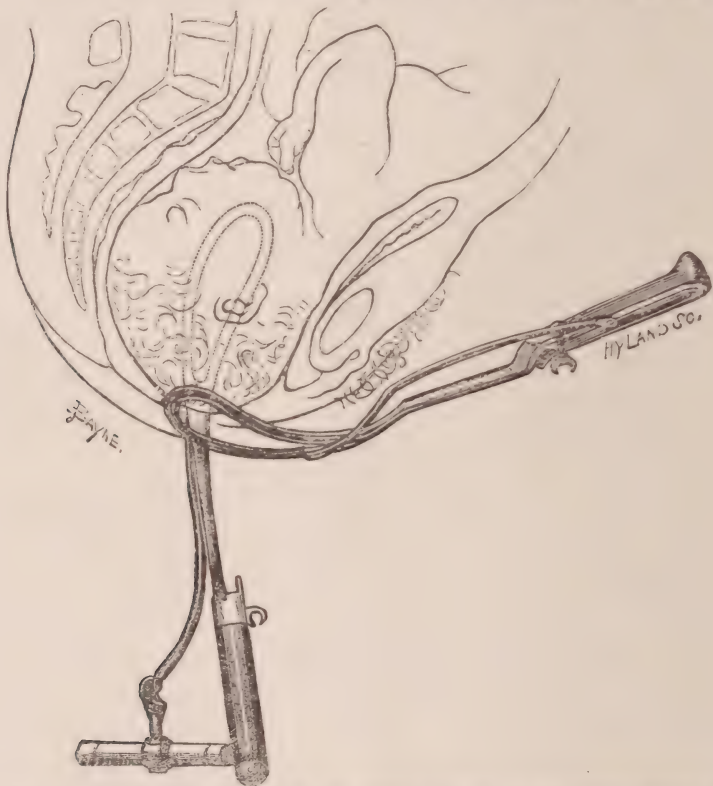


FIG 3.—Commencement of introduction of the second or right half of axis-traction forceps, showing the traction-rod pushed forward past the shank.

ago, in a difficult case, where two of us made traction on the handles and on a towel tied round them, while he manipulated the lock and shanks so as to press back the head into the hollow of the sacrum. Now Hermann's contrivance simply consisted in applying an instrument like a two-pronged fork, with a transverse bar for a handle, into two depressions close to

the forceps' lock. The fork is so contrived that it may be applied either from the anterior (upper or pubic) aspect, so as to make backward pressure while traction is made through the handles, or from the posterior aspect closer to the blades, so as to make backward traction to correct the loss and misdirection of force applied to the handles. But this ingenious attempt of

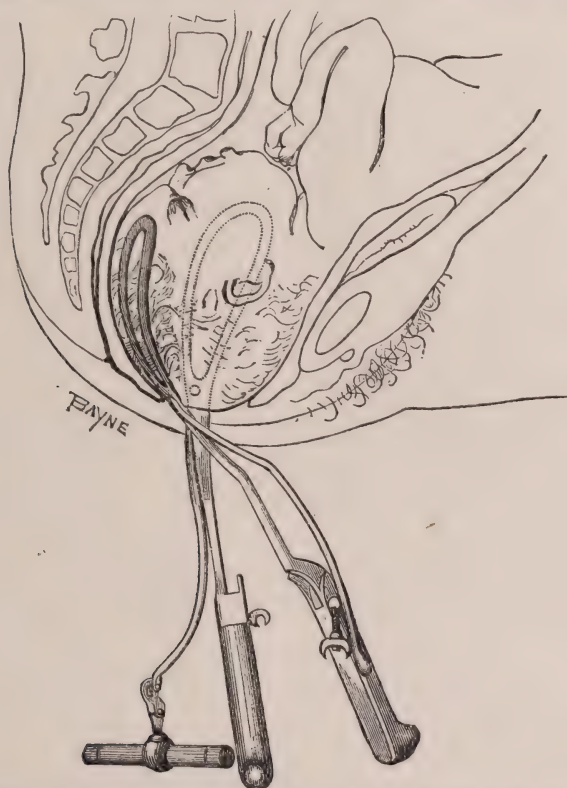


FIG. 4.—Second or right half of axis-traction forceps carried further on in the hollow of the sacrum, and moving toward the side of the foetal head.

Hermann to render more precise the point at which the corrective pressure is applied, has nothing in common—and I wish broadly and again to emphasize my allegation—with the Tarnier traction-rods, which make traction, I repeat, directly on the head-embracing blades; which have a compensation curve allowing of direct traction in the axis through which, at any

given moment, the centre of the head should move; and which are guided in the course of their action by the constant change in the direction of the application-handles—change permitted and produced by the loose jointing of the traction-rods to the heels of their respective blades. Dr. Smith seems to think that Hermann's contrivance was lost sight of, only because he had



FIG. 5.—Mode of locking the blades after the traction-rods have been thrown back to their proper position.

not the opportunity of proclaiming its value from a professional chair. He seems not to know that not only was Hermann Professor of Midwifery in the University of Berne—he enjoyed also the Persian blessing of being succeeded in his office by his son. No; his suggestion fell dead, because, as Dr. Smith's paper shows, its object can be effected just about as well or as ill with

the unarmed hands. From Dr. Smith's own drawings we can see him attempting to avoid loss of power and misdirection of it by clasping his hand over the neighborhood of the lock, and making backward pressure with the ulnar edge, while the thumb pushes the extremities of the handles upward and forward; and Hermann made the same attempt, by pulling with one hand on

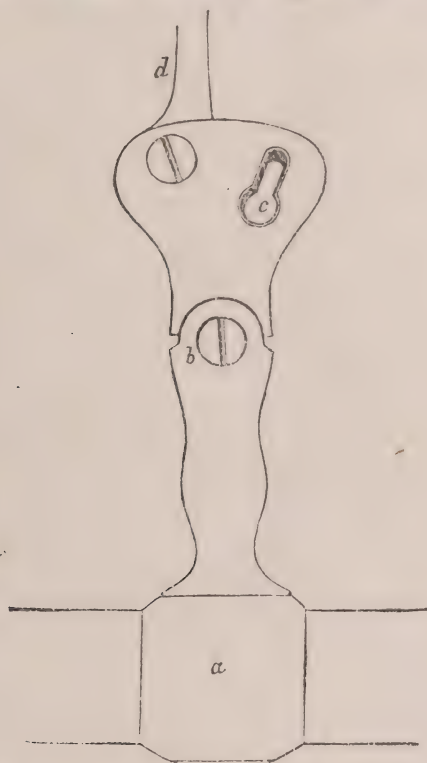


FIG. 6.—Locking-plate and joints of the traction-handle (full size). *a*, Joint for rotation of traction-bar; *b*, Joint for lateral movement; *c*, Opening and slot for locking of right traction-rod; *d*, Left traction-rod permanently jointed to locking-plate.

the handles, and pressing with the other, by means of his fork, on the lock.

There is more force in the allegation that Tarnier's forceps is the same in its principle of action as the forceps with recurved handles of Hubert or Aveling. Hubert and Aveling have both, and I believe independently, demonstrated the impossibility of

making correct traction with forceps having curved blades and straight handles. They have both, accordingly, advocated the use of instruments made with a compensation or perineal curve on the handles. In this Tarnier forceps precisely corresponds

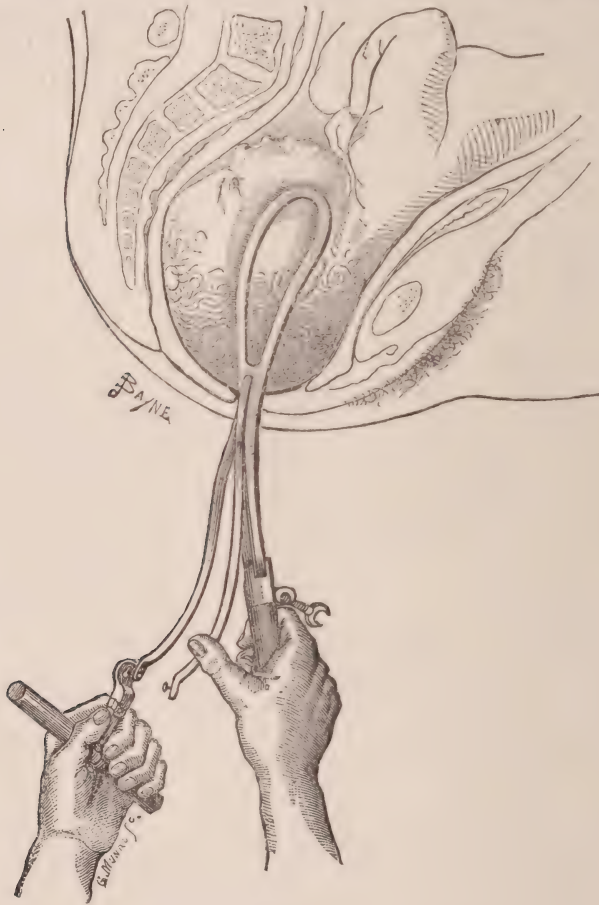


FIG. 7.

with such S-shaped forceps. The compensation curve on the traction-rods, where they approach the traction handle, has precisely the same effect as the curve in the handles of the scientifically constructed forceps of Hubert and Aveling—the effect, namely, of allowing direct traction in the axis of the pelvis

without loss or misdirection of effort. But while the Tarnier forceps has the correct axis-traction curves in common with both these forceps, it has, in addition, the distinctive feature of having the traction-rods (as I have already said more than once) so jointed to the blades that the movements impressed on the application handles gave a constant guide to the operator as to the direction in which we ought to pull. Now this double property of the Tarnier forceps—of, *first*, giving power of correct traction, and, *second*, giving a guide to the proper direction—puts the obstetrician who uses it at a great advantage over the operator who has only an ordinarily curved instrument in his hand. We have used it in all imaginable cases, and have had recourse to the various manipulations recommended with the view of obviating the loss and misdirection of power that their construction involves. In the simple cases—and these, to be sure, constitute the majority of forceps cases—we have accomplished the delivery of the child to our perfect satisfaction, and without the expenditure of much strength or skill. But cases have sometimes met us that tried all our strength and taxed all our skill, that sometimes baffled us completely, or were terminated by the extraction of a damaged child from a damaged mother. And we find the axis-traction forceps effecting delivery with more safety to the woman and child. Let who will continue to use ordinary curved forceps, an obstetrician who has used the Tarnier forceps in a few test cases will no more think of reverting to the other than a man who can afford to keep a carriage will continue to practice as a peripatetic. He may use the defective instrument occasionally to keep muscle and mind in exercise, or because the case is so easy that it can be finished with anything, but in the general run of his work, and in all his difficult cases, the axis-traction forceps becomes for him a valued necessity.

Objections have been offered to the Tarnier forceps in regard to its construction. It is a misfortune that in his earliest models Tarnier had the compensation curve not only on the traction-

rods, but on the application-handles. This curve in the handles was to my own mind one of its drawbacks. When we have become familiarized with the introduction of curved blades with straight handles, we feel as if we had to learn all our lesson over again when we begin to use an instrument with recurved handles, even of the simplest form, such as Hubert's or Aveling's. Tarnier has quite done away with the curve in the shank and handles, retaining only the curve of the traction-rods.

Objection continues to be made to the use of the fixation screw, which is supposed likely to cause and keep up too forcible compression of the head of the child, as if it could impart to the forceps something of the character of the cephalotribe. But it is important to remember that whatever the kind of forceps employed, the head is inevitably compressed. In the testing cases the operator who pulls on the head by grasping the ordinary handles, compresses the head with a force which he loses all power of estimating, and which perhaps he only realizes when he sees it imprinted, as it has been times without number, on the scalp or even skull of the infant. The use of a fixation screw enables the operator to compress the head to a degree which his unstrained muscular sense enables him to appreciate with great precision. He has only to fix the screw at the point where he feels that he has obtained a grasp of the head that is sufficient to hold it fast and that is safe in its amount of compression. It thus, as Prof. Howard has clearly recognized and fittingly stated, comes to be a "regulation screw," preventing the justly-dreaded danger of over-compression of head.

To my own axis-traction forceps the objection has been offered by Dr. Barnes that the instrument is too small. I have never yet met with a case where the model I exhibited to the Society did not suffice to reach the head and extract it even when the head lay above the brim. But I know no reason why the forceps should not be made as long as those of Dr. Barnes,

at least as regards the blades and shanks. The forceps I have recently used accordingly measures nine inches from the lock to the tip of the blades. Besides thus increasing the length of the forceps, I have, at the suggestion of Dr. Hart, made a slight change in the flattened extremities of the rods to which the knobs are attached. It was found that the head of one of those knobs or buttons was liable to break, because the rods met the locking-plate at an angle. But by making the flattened ends of the rods pass at an angle from the stem and lie parallel to the locking-plate, all risk of such accident is obviated. Dr. Lyon objected that the traction-rods were not of sufficient strength. This difficulty also it would be easy to overcome. But I have tested the rods that I have had in use, and find that a weight of 200 lbs. does not strain them; and I do not suppose that in my most difficult case I have found it necessary to apply nearly half that force. [After describing several other forceps and improvements suggested to be made on the Tarnier instrument, the writer continues].

Every effort to improve the axis-traction forceps is a witness to the value of the principle on which they are constructed, and M. Tarnier, who has repeatedly modified the form of his own forceps, has shown no jealousy of the proposed modifications. Doubtless, changes will yet be suggested which will be found to render the instrument more manageable without compromising its utility. I can easily believe that in the process of evolution the application-handles will become lighter and less, and the locking-plate more simple and at the same time more secure. But whatever changes may be effected in the construction of the forceps, it seems to me that the perfect instrument must, *first*, have its traction-rods permanently attached each to its own blade. It is no advantage, but a drawback, to have the traction-rods so contrived that they may be used in one case and not in another. No operator who has the option of making axis-traction should ever expose himself to the temptation of pulling by the application-handles. I began myself with the

error of fitting removable traction-rods to our British forceps, but quickly learned that the rods were a necessity for every case, and must be permanently attached to their respective blades. I think, even, that there will be no loose or separable part of the instrument, as in Tarnier's and Lusk's models, when the instrument is perfected.

This leads me to remark, *second*, that the traction-rods must be so contrived as to be capable of being easily locked and unlocked. Perhaps, for example, instead of having them meet in a locking-plate, as in my model, the traction-handle might be attached to the left rod by a ring, into which the right rod could be hooked. Then, *thirdly*, the fixation screw must be applied close to the lock, and be capable of easy manipulation, because, after each tractile effort it is well to relax it, and it must again be fixed before renewing the effort.

And now I will try to show you that the introduction and adaptation of forceps furnished with permanently attached traction-rods offer no greater difficulty than in the use of our ordinary forceps.

The left half of the instrument is, as usual, to be first introduced. This has the traction-bar or handle attached to its traction-rod; and if the rod be pushed in front of the shank it offers no difficulty to the manipulator. The handle should be held in the left hand, and guided into the canal with the fingers of the right, as seen in Fig. 1. The blade having been passed according to the usual rules, and adapted to the head, the traction-rod is pushed back to its ordinary position (see Fig. 2). The traction-bar is loosely jointed and swings freely about without at any time interfering with the passage of the second blade. When the patient is placed, as she commonly is with us, on her left side, it is not even necessary to take the precaution of pushing the left traction-rod in front of the shank. But in introducing the right half of the instrument, it is in every case necessary to push forward the traction-rod (see Fig. 3). If it be left swinging backwards it is apt to get entangled in the left half of

the lock. This blade (held as usual by the right hand, and guided with the left) having been passed first backwards towards the hollow of the sacrum, and then round so as to be applied to the side of the child's head (see Fig. 4), the operator pushes back the traction-rod, and proceeds to lock the instrument in the usual way.

I was at one time afraid that in cutting off the German traction-hooks or shoulders we should be deprived of the power of easily adjusting and locking the blades, which we obtained by placing the thumbs on these lateral projections in our old familiar forceps. But I find that the projections of the fixation screw on the anterior surface afford the same facility. If, therefore, after the traction-rods are in their proper place, we grasp each handle with its own hand, and place the thumbs on the two parts respectively of the fixation screw (see Fig. 5), we obtain a purchase for moving the blade in any direction so as to secure their proper adaptation and their easy locking.

So far the application of axis-traction forceps corresponds to the application of the ordinary instrument, but for the necessity of shifting the position of one or both of the traction-rods. But now, further, we proceed to lock the loose right traction-rod by passing its knob or button into the slot in the locking-plates (see Fig. 6).

This manœuvre is not difficult, and is done in a second or two after we have practiced it for a few times either on the phantom or when simply holding the forceps in the two hands. The locking is effected by laying hold of the application-handles with the right hand and the traction-handle with the left. (See Fig. 7.) The thumb of the right hand lays hold of the free extremity of the right traction-rod, the forefinger of the left hand brings the locking-plate into relation with it, and so the locking is effected.

When an obstetrician has taken the trouble to apply to the head of the child a pair of axis-traction forceps, he finds himself more than compensated by the additional power he finds him-

self able to employ in the difficult cases, the delicacy of touch with which he feels that he can manage these cases, and the certainty with which he can pull in the pelvic axis in every case. Before applying traction, however, he grasps the application handles until he feels that he has got hold of the head so firm that the blades will not slip, yet not so forcible as to produce injurious pressure. At this point he secures the fixation screw. He then proceeds to make traction with one or both hands, grasping the transverse bar or traction-handle. In the great majority of cases the traction is made with the right hand alone, the left being free to watch the progress of the head and guard the perineum. Traction is made as usual during the pains, and when no pains are present, at intervals. After each tractile effort the fixation screw may be slackened, to be fixed again before the next pull. The most important rule to be observed in using axis-traction forceps is to keep the traction-rods parallel with the shanks. When the rods are parallel with the shanks, the cord of the pelvic curve of the blades runs in a straight line to the centre of the traction-bar, and hence traction on the bar carries the head along the axis of the pelvic plane occupied at the given moment by the foetal head. As the head descends the application-handles must never be touched, and they can be seen to move more and more forwards until at last, as the head emerges from the outlet, they lie nearly parallel with the abdominal wall.

I have already said that the use of properly curved traction forceps is necessary in every part of the parturient canal. And now, with regard to the perineal part of the canal, I wish to remark especially that axis-traction forceps with jointed rods enables us to guide the head more accurately along it. We can feel more distinctly the amount of strain we put on the tissues, can more delicately prevent too rapid expulsion of the head during parturient effort and make traction when the effort is passing off, and can all the time be sure that the head is progressing in the safest direction. When the head is born the

fixation screw is first relaxed and the right traction-rod unlocked, and then each blade can be slipped off in turn.

I may sum up these remarks in the following propositions:

1. The extraction of the foetal head through any part of the curved parturient canal demands the use of a forceps having the pelvic curve (curve of Smellie and Levret). 2. Extraction with such an instrument cannot be made without loss of power and mis-direction of power, unless the handles have a compensation curve (perineal curve of Johnstone, Moralès, Hubert and Aveling). 3. The addition to the blades by a joint or hinge of compensationally curved traction-rods gives the possibility of correct axis-traction, while the change impressed on the direction of the fixed application-handles affords an index to the operator as to the line at which at any moment he ought to pull (axis-traction rods of Tarnier).—*Edinburgh Medical Journal, New York Medical Abstract.*

DIPHTHERIA.

From a lecture by Dr. Morrell Mackenzie, published in *Med. Record*, we extract the following:

I think that, at the beginning, diphtheria is a local disease. I believe that the effect of the poison may sometimes be so great that the disease appears to be constitutional from the commencement. I believe that such cases are analogous to those of scarlet fever or small-pox, where the patient is struck down at the very moment of the invasion of the disease. The poison must enter through some part of the system, and I believe that it is local at the beginning. These points bear upon prognosis, and are of great importance. From prognosis we will now pass to

TREATMENT.

Here, again, remedies of the most varied character possible have been recommended. I recollect reading a paper written by a French physician, in which he said he bled every patient, and that he treated fifty or sixty, and every one recovered. All I

can say is that if we should treat diphtheria in London in this way, I think we would almost be prosecuted. It is exceedingly bad treatment. It only shows that it is possible to make a bad diagnosis, or else it is possible for some people to stand depletion in a most extraordinary manner.

The first great point in the treatment of this disease is to attend to constitutional measures and then to local treatment. The constitutional treatment is of no less importance than the local. It is necessary to support the patient from the beginning, and stimulants are of the utmost importance. Do not wait until the patient becomes depressed, but give stimulants from the very commencement. This is an exception to all diseases, and you must begin with stimulants at the commencement, and give them in the more solid form, such as brandy diluted with water, or port wine; such as furnish nutriment as well as alcohol. When the patient is beginning to recover, the light wines, especially champagne, are useful; but, in the early stages, port wine, with water, is one of the most useful you can give.

Stimulants must be given during the night as well as during the day in a very large number of cases. I have seen many cases where patients have died through want of having stimulants administered during the night. In young children it is very frequently necessary to awaken the patient and give stimulants. As a general rule, it is bad to wake a patient out of a refreshing sleep to give medicines; but here is an exception, and I would say that if the child sleeps more than four hours, it must be awakened and stimulants and nourishment administered.

We now pass on from the use of stimulants to the use of medicines. Here, again, we meet with a very great variety, but the most useful, perhaps, of all, is the perchloride of iron. In this matter I am entirely in accord with Professor Jacobi, who has found the remedy more useful than any other. Professor Jacobi has laid it down that this medicine should be given in full doses. It is also important to give a per salt of iron, which can be assimilated with comparative ease, and probably the per-

chloride is the best you can use, and of it at least a drachm a day, diluted with water, should be administered; fifteen drops, well diluted with water, four times a day. The only time when I have not given the perchloride of iron has been when I have been trying the local effects of some agent that has been employed. Quinine is a very useful medicine. When the temperature is high it has a very great effect in bringing it down nearly or quite to the normal. These are perhaps the most important of the constitutional remedies.

All sorts of specifics have been recommended, but I have not had much success with them. Chlorate of potash has been very much praised, both as a constitutional and a local medicine. You may give it, because it cannot, in proper doses, do much harm, and it may do some good. There is one remedy which has been recommended by a gentleman whom I see before me, Dr. Beverley Robinson, and that is *copaiba*, which has an important effect upon mucous membranes, as possibly some of you may have had occasion to observe. But its effects are not confined to the mucous membrane of the urethra. It also produces a marked effect upon the mucous membrane of the pharynx and larynx, and that of the whole bronchial tract. I have tried Dr. Robinson's recommendation, giving the medicine in the form of pearls, which the French make, and which children take very easily, and I have administered them with great success. But I must mention that I have used it in the catarrhal form of diphtheria—the milder cases where the exudation is not very adhesive. When the more serious cases of diphtheria are about, you get a large number of cases of catarrhal diphtheria, and in those you will find great benefit following the administration of *copaiba*.

We will next pass to local remedies, and here again we have a very wide field. A great many doctors may go through a lifetime and see only a few cases of diphtheria. Some meet with severe epidemics, and others with epidemics mild in character. The consequence is that an immense number of remedies

are not only recommended, but the doctors say that they have not lost a case since they began to use such and such remedies. You must look upon such statements with great suspicion, and it is safe to consider that the doctors who have treated so large a number of cases with such uniform success have, at least, treated a mild type of diphtheria.

The local remedies in most common vogue are lime-water and lactic acid. Both of these remedies have one great advantage; they do not do any harm, and here I may say, gentlemen, that it is a great thing, when you are trying a remedy, to use one that does no harm. In earlier days severe caustics were used, such as hydrochloric acid, nitrate of silver, and, if the patient recovered, it was always thought that event was due to the acid or the silver. But all that has been changed. We now know that if strong caustics are used the effect is almost always to cause extension of the disease. The remedy inflames and irritates, and a false membrane is formed in close contiguity to that which previously existed. When we were suddenly told by German physicians that lactic acid was used with great benefit, and also lime-water, the news was so gratifying that we all used these remedies, which were not injurious or painful to the patient. Both have been found useful.

I ought to say here that certain solutions have been said to be useful because of the effect they produce upon the false membrane, causing it to gradually dissolve and disappear in a short time. But, unfortunately, when we have to deal with the living subject we have a totally different condition of things from that which is present in making experiments, and I have found that when using substances locally sufficient to have any effect upon the false membrane, they had an irritating effect on the mucous membrane which I was treating. Hence I returned to the use of such remedies as do not irritate, and have given up those which had a reputation for dissolving false membrane. With regard to lactic acid and lime-water, they do not have much effect upon the false membrane in the test-tube, but they

certainly do seem to have considerable effect when applied to false membrane growing upon mucous membrane. It is very difficult to make accurate observations with regard to the progress of the disease from hour to hour in children; but I have had opportunity to try both remedies upon false membrane inside of the lip and upon the tongue, where I could watch the effect. I recollect three cases in which I tried the experiment with lime-water where false membrane was growing upon the inside of the lip. I treated one side with lime-water and left the other to nature, and the side treated rapidly improved, while the other remained stationary. So I believe that lime-water is useful as a local application, and in this respect I differ with my friend Dr. Jacobi, who believes that both lactic acid and lime-water have been over-estimated. I strongly recommend that you should use them in every case.

We now pass on to another class of remedies, which I wish to bring to your notice, namely, those which shut out the air. This class of remedies I have introduced, and they have been employed in England to some extent. I refer to what may be called varnishing the mucous membrane with benzoin, or tolu dissolved in ether or chloroform or alcohol, and also used in various mixtures. I found as the result of considerable experiment that tolu dissolved in ether in the proportion of 1 to 5, made an excellent varnish, and that when applied to the mucous membrane it did not cause pain or inconvenience, was sufficiently strong to hold, and did not require to be repeated. Many of these local remedies have been recommended on the ground that they destroy germs. Just here it occurs to me that I have omitted to speak of carbolic acid and salicylic acid, etc. Carbolic acid is an excellent remedy, and it has the effect, as has been demonstrated, of destroying germs, and if used sufficiently diluted it will do no harm.

All this class of remedies have been recommended upon the scientific ground that they destroy germs.

The principle upon which I have introduced the remedies which varnish the mucous membrane is, that whatever the poisonous element may be, whether a vegetable growth or some other germ, or something else, this living matter that causes false membrane to be formed, requires the presence of air. Directly you exclude the air you prevent the growth of germs which require air for their existence. As soon as possible, therefore, I apply this varnish over the false membrane; not only over the false membrane, but all around it. It is of itself to a certain extent a germ destroyer, but everything depends upon the coating of varnish being air-tight. Some of my friends, at first, found considerable difficulty in applying it, and I also had the same experience. At first I wiped the surface, to which it was to be applied, with blotting-paper. I carefully applied this absorbing material to different parts of the throat, and then immediately afterwards applied this varnish. This plan answers perfectly well when you can do it; but every now and then you will find a patient who will retch a little just after the blotting-paper has touched the surface, and the mucous membrane becomes wet before you can apply the varnish. I then adopted the plan of putting a piece of lint around my finger and drying the throat with this, and then quickly applying the varnish with a brush. This does not hurt the child, and I speak of children because nine-tenths of our cases occur among children, and it answers perfectly well; but if you should have difficulty with this, I should advise you to apply the varnish all the same. I have had several patients treated entirely by the use of varnish, without constitutional remedies, and with good results.

I shall feel exceedingly proud if, as the result of this lecture, gentlemen shall try the effect of this varnish.

I will now say a few words with reference to the use of steam and the use of ice. Both these remedies are useful, but they should be applied in different classes of cases. In the early stages it is very useful to employ ice. It affords the greatest

comfort to the patient. Let them have ice, and take as much as possible. Many young children are pleased to have pieces of ice put into their mouths. There is no doubt that it restricts the associated inflammation so often present. In the early stages it is most desirable to use ice, and you can use any amount of it without doing harm. It is only in exceptional cases, where the patient is very much depressed, and in the very advanced degrees of poisoning, where there is gangrene, that ice does harm. In many cases it diminishes the violence of the attack.

With reference to steam, it was first recommended, I think, by Mr. Prosser James, of London. Afterward it was pointed out by Oertel that steam must cure almost every case, and that it was the only remedy of any value at all, because the effect is to separate the false membrane from the mucous membrane. The fact is that when a certain point in the disease has been reached, when the false membrane is beginning to separate, steam is useful. At that time its effect is admirable. In the early stages I do not think it does any good. I think it lowers the vitality of the tissues, and that its effect is most prejudicial; but when the false membrane shows evidences of separating from the mucous membrane its effect is most beneficial. So you need have no fear of clashing heat and cold, for you use ice at first and steam afterward, when the disease has reached a certain stage. One great advantage of steam is that you can use some antiseptic with it, such as carbolic acid, salicylic acid, or any other substance you may choose. And I should advise you to use some mild antiseptic at this stage of the disease, because a certain amount of gangrene is usually present.

PLEURISY AND EMPYEMA IN CHILDREN.

In giving the symptoms and physical signs of pleuritis, as exemplified in a patient twenty months old, Dr. Pepper called attention to the presence of bronchial breathing in the affected

side, and to the making of the characteristic symptoms in the early stage of the attack.

The common statement is, that over large pleuritic effusions there is, in addition to the flatness or percussion, feebleness or absence of respiratory murmur. The vesicular murmur is, in truth, usually suppressed under such circumstances, but it is not uncommon to hear bronchial breathing. This has certain peculiarities in pleuritis, viz., it seems distant, and the respiratory element is most marked: it is, in fact, an exact counterpart of the laryngeal sound caused by obstructed breathing and disappears when the patient breathes with the mouth open so as to make no noise in the throat. The probability is that the sound is transmitted from a partially obstructed bronchial tube, from the larynx or trachea through the tense thoracic walls to the ear. Such bronchial breathing differs from that heard over a solidified lung, in that the latter seems immediately under the ear, and wants the great accentuation of the expiratory element.

In regard to the second point, the symptoms of acute pleuritis in children are often masked by the symptoms of disorder of the stomach or bowels, or by nervous symptoms simulating the onset of a specific fever. The pain, when the child is old enough to complain of it, is often referred not to the chest, but to the stomach, the back, or even the thigh. This difficulty in diagnosis is only to be overcome by invariably examining children thoroughly—especially those who are too young to tell their symptoms—and attending particularly to the heart and lungs.

The treatment advocated for the early stage is the application of leeches and counter-irritants, and later, when effusion has taken place, of blisters. Quinine must also be given in large doses with the object of counteracting the tendency, so marked in children, to the conversion of the serous effusion into pus. When fever has subsided, iodide and acetate of potassium may be administered, with digitalis if there is cardiac irritability.

If the effusion does not quickly disappear under this plan of management, an exploring puncture with a hypodermic needle should be made to determine the character of the fluid. If pus be found it should be removed by aspiration. Sometimes, more frequently than in adults, there is no re-accumulation, but if there should be, a silver tube with a valve or a flexible drainage tube must be inserted. Disinfecting injections are not often called for in children.

When left to nature the most favorable termination of empyema is spontaneous perforation of, and evacuation through, the chest walls. This occurs much more frequently in children than in adults. The point of perforation is usually on the antero-lateral surface of the chest, in the fourth interspace. The next most favorable termination is perforation into a bronchial tube. In both cases ultimate recovery is the usual result.

On the other hand hectic fever may develop and the child die exhausted or be carried off by some intercurrent disease of the stomach or bowels; or some latent tuberculous tendency may be developed; or finally the pus may concrete into a semi-solid mass and a lingering illness, resembling a slow phthisis, ensue.
—*Philadelphia Medical Times.*

AUTOPSY ON A CASE OF PROLONGED VOMITING.

The following case, recently under the care of Mr. Wm. H. Rix, surgeon to the Tunbridge Wells Infirmary, will, I think, be read with interest:

Mrs. E. J——, aged fifty-eight, had suffered more or less for twenty years from this distressing symptom, the character of it being that frequently after food she suffered from a sense of pain and heaviness somewhat above the pit of the stomach, which continued until vomiting ensued. This, however, was not always so, as sometimes during a period of two or three days she would be tolerably free from both pain and sickness. On physical examination of both chest and abdomen, no signs

had been discoverable; the urine contained no albumen, and the normal functions, except those of taking food and digestion, had been carried on well. The patient died on July 29th from gradually increasing anæmia and inanition.

At the post mortem the pleuræ were found firmly adherent throughout, but the lungs presented no signs of pressure; the pericardium was also intimately adherent where it met the chest-wall, and also to the whole of the surface of the heart; the left ventricle and aorta were considerably dilated; there were several bronchial glands much enlarged, and in a condition of calcareous degeneration. The mucous membrane of the stomach was fairly normal, with the exception of an area of undue vascularity along the lesser curvature; the organ itself was somewhat shrunken, while the cardiac orifice was excessively contracted, only just admitting the little finger, and that with difficulty; there was, however, no thickened or indurated tissue around the contraction. The œsophagus was enormously dilated above this point of stricture, containing a large quantity of grumous fluid. It occupied a position to the right of the vertebral column, lying in the hollows formed by the angle of the ribs. At the spot where the dilated œsophagus came in contact with the diaphragm it was bent on itself nearly in the form of a right angle, forming a curve as it passed from the right side of the chest to the opening in the diaphragm on the further side of the mesial line. On removing the organ its shape was found to have a remarkable resemblance to an ordinary stomach; it had a gross cubical capacity of twenty-five fluid ounces, and the muscular tissue was found to be very much hypertrophied. The kidneys were slightly granular, but the other organs fairly normal.

The point of interest is that such a partial stricture should have caused so enormous a dilatation above it, and the strong probability is that it was due to the adhesions, existing in the thorax, undergoing gradual contraction, and so causing a deviation of the œsophagus from the direct line at its passage

through the diaphragm, and thus was produced a dragging on this structure against the tendinous fibres of the diaphragm, converting a canal, the comfortable patency of which is so necessary to health, into a condition of obliquity and stenosis, varying according to the movements of the diaphragm and the contents of the thoracic cavity.—*H. Wheatley Hart, M. R. C. S., in The Lancet.*

CHLORAL POISONING.

What are the remedies to be employed in acute chloral poisoning? They are especially those designed (1) to sustain the action of the heart, such as ammonia and brandy; (2) to keep up the breathing by artificial respiration, if needed; (3) to keep the patient warm; and (4) to use electricity as a cutaneous stimulant. Thus far you would treat a case as an ordinary one of narcotic poisoning. But is there any remedy that will counteract the depressing effects of the chloral upon the nervous centers, and particularly the respiratory center? Yes; the remedy for this purpose is strychnia, which antagonizes the chloral. It may be used as we gave it here, hypodermically, one-sixtieth of a grain every three hours at first; and it would have been given oftener, but it was not needed. Strychnia, therefore, is indicated as the physiological antidote. It stimulates the centers which have been depressed by the chloral. When recovery takes place, it is usually rapid.

What should be the treatment of chronic chloral cases? Suppose that a patient like this says that the habit is growing upon him, and comes to you for advice, what course would you pursue? I would answer that you must reduce the dose gradually. As large doses of chloral are only given exceptionally, there will be less difficulty on this score than with opium; but as you reduce it, I would strongly advise you to give strychnia or nuxvomica for its effects on the nervous system. It antagonizes the effects of the chloral, and acts as a tonic at the same time.

Those nervous centers which are reduced in their activity by the paralyzing effects of the chloral are stimulated by strychnia. If you use strychnia you may stop the chloral almost at once without any bad effects being observed. I had a case in point last summer. A gentleman who had been taking chloral for some time found himself very weak, his will-power impaired, and he felt miserable. He determined to stop off entirely. He went to Atlantic City without a single grain of chloral. He took constant out-door exercise. He was sleepless for a time, but he was able to overcome his evil habit; and, although he had been using chloral regularly for eighteen months, he recovered entirely. It should be stated, however, that while giving up the chloral habit he took, from time to time, strychnia or nux vomica.—*Philadelphia Medical Times*.

TREATMENT OF TONSILLITIS.

Dr. S. Solis Cohen gives the following treatment, which he says is pursued at the Philadelphia Polyclinic with eminent success:

1. In simple inflammatory tonsillitis, take two fluid drachms each of the ammon. tinct. of guiac. and the comp. tinct. of cinchona, mix with six fluid drachms of clarified honey and shake together until the sides of the vessel are well coated; add gradually a solution of eighty grains of chlorate of potassium in four ounces of water, shaking meanwhile. This is to be used as a gargle every one-half to three hours. Relief is usually experienced within a few hours and recovery is prompt. A saline cathartic may accompany the use of the gargle. None of the cases seen suppurated, and if seen within the first twenty-four hours such accidents are very unlikely.

2. In rheumatic or constitutional tonsillitis (characterized by intense pain in swallowing, causing great accumulation of saliva from unwillingness to swallow, with slight, perhaps no, congestion of throat, and subsequent fever; one or both tonsils be-

coming enlarged after some hours as the febrile symptoms decline, and muscular or joint rheumatism sometimes developing later), after a saline cathartic, give the following in table-spoonful doses every two hours:

℞	Sodii salicylate,	℥ ij,
	Ol. gaultheriæ,	℥ j,
	Liq. ammon. citrat.,	
	Syrup simp.,	℥ ij.

Lengthening the intervals as the pain subsides. Pieces of ice or guaiac gargle promote comfort and the stiff neck is best relieved by faradization. Salicylate of quinine or cinchonidine may be substituted for the above if a tonic be required, in five-grain doses every four to six hours.—*Medical News*.

DIAGNOSTIC VALUE OF UTERINE HEMORRHAGE AFTER THE MENOPAUSE.

During the course of a late clinical lecture on malignant disease of the cervix uteri, Dr. T. Gaillard Thomas stated, as an axiom in gynecology, that if a woman who has normally ceased to menstruate begins to have uterine hemorrhage, always suspect carcinoma. Not infrequently will you see in the medical journals the reports of cases begun to menstruate regularly again; but such accounts are altogether deceptive, and, if these cases could be followed out, it would be found, with scarcely a single exception, that the uterine flow was merely the indication of the presence of malignant disease. In other words, there is absolutely no such thing as the return of the menses when a woman has once reached the normal menopause. Not long since a patient of mine in the Woman's Hospital, who is sixty years of age, began to have a flowing from the uterus, and, as there was no indication of any external disease, I applied the curette to the endometrium and drew out some pulpy masses, which I sent to a well-known microscopist

for examination. The report that I got from him was that the growth was not malignant in any respect, but simply a form of polypus. I am perfectly sure, however, that the microscopist is wrong, and for this reason: In the uterus of a woman of sixty, polypi never develop. The organ at that age is completely atrophied. Sometimes in women who have passed the menopause you will find uterine tumors which have all the appearance of fibroids. They are not by any means fibroids, however, but sarcomata.—*New York Medical Journal*.

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, December 4th, 1883.

Present—Dr. Cronyn in the Chair, Drs. Mann, Tremaine, Brecht, Coakley, Hinkel, Campbell, Greene, Wyckoff, Bartlett, Cary, Frederick, Clark and Packwood. Drs. Hawkins and Park were present by invitation.

Dr. Howe presented a case of very obstinate conjunctivitis which had yielded to treatment by jequiriti. At the time treatment was begun the cornea was opaque. Result excellent.

Dr. Hartwig read a paper on sponge-tents and their uses in medicine. The article appears in this number.

Discussion—Dr. Mann said he regretted being obliged to differ with the essayist in the general use of sponge-tents as suggested by him, owing to the putrefactive changes which these tents produce and the resulting septicæmia. He uses as explorative measures steel instruments and then the tupelo-tent, and only dilates once, and does not use even the tupelo for consecutive dilatation. He would limit the use of the sponge to treatment of chronic enlargement of the uterus where the irritation assisted in bringing about a case.

Dr. Park spoke of the use of slippery elm and rawhide tents, especially in connection with surgery.

Dr. Bartlett spoke of the use of tents in epistaxis, and said he had never seen any bad results follow its use; he also claimed originality in their use.

Dr. Greene spoke briefly on the same subject.

Dr. Cronyn stated that Dr. Bartlett was not the originator of the use of sponge-tents in nasal hemorrhage, but claimed he had suggested it himself to Dr. Bartlett.

Dr. Bartlett replied that he had used it before he had had the pleasure of knowing Dr. Cronyn.

Dr. Hartwig closed the discussion by stating that his paper was to show as well when not to use the tent as when to resort to its use.

Voluntary Communications—Dr. Tremaine showed a stone which he had removed from a child three and one-half years old, by supra-pubic operation. He said it was the largest ever removed from a child of that age.

Dr. Park said that the supra-pubic operation was not often performed in this country, but was a familiar operation on the Continent; also that the anatomy of the child seemed especially to recommend this form of operation. He also exhibited a stone which he had removed recently by lithotrity. Weight, 1,290 grs., dry.

Dr. Clark gave the result of a post mortem examination, where he found a foetus in the abdominal cavity, the result of a ruptured ovarian pregnancy at five months; showed the uterus and appendages.

Moved and carried that the privileges of the association be extended to Drs. Park, Hawkins and Campbell, until such time as they can join.

Prevailing Diseases—Scarlet fever, some typhoid fever, measles and dysentery.

Adjourned.

CHARLES CARY,
Acting Secretary.

Editorial.

PROGRESS OF THE STATE FACULTY BILL.

As the time for the assembling of our legislature draws near, the interest in the effort to secure the passage of the State Faculty bill naturally increases. Since our last issue, prominent members of the press have given the bill editorial mention, and in the cases of the *Commercial* and *Express* of Buffalo, of the *Albany Evening Journal* and the *Syracuse Standard*, the mention has been quite commendatory.

This is a most encouraging sign and shows, to a demonstration, that the bill is drawn, not in the spirit of faction or in the interest of cliques, but in the interest of the medical profession; and this interest is inseparable from the good of the people.

The time for holding the stated meetings of the county societies is in general later than this, but still the committee having the subject in charge have received official notification of the endorsement of the bill by the societies of Wayne, Westchester, Rockland, Cayuga, Oswego, Chemung, Herkimer and Niagara, and what seems quite remarkable, when the uncompromising character of the measure is considered, in almost every case the endorsement has been by unanimous vote.

In addition to this, letters are received from various points in the State, pledging the best efforts of the best men in the profession to this cause. We have also remarked, with great commendation, the freedom from extravagant expression in the official utterances in this connection. Doubtless, there is in the minds of many a strong feeling adverse to the schools, and yet in every instance that has come to our notice there is a full and ready recognition of all their legitimate rights, and a most remarkable forbearance and moderation in the treatment of this feature of the case. As an instance, we cannot do better than produce, as we are permitted to do, the following account of the action of the medical society of a neighboring county:

ELMIRA, December 20, 1883.

At a meeting of the Medical Society of the County of Chemung, held at Elmira, December 18, 1883, the following preamble and resolution, offered by Dr. Wm. Woodward, delegate to the Medical Society of the State of New York, were unanimously adopted.

F. W. ROSS,
Secretary.

WM. C. WEY,
President.

WHEREAS, The act proposed by the Medical Society of the County of Erie to establish the Medical Faculty of the University of the State of New York, is designed not to restrict the powers of Medical Colleges to confer diplomas, but to create an independent board, with authority to review the qualifications of such graduates, for the purpose of giving or withholding license to practice medicine and surgery in the State, as may be determined by a rigid and impartial examination; and, whereas, the said act to establish the Medical Faculty of the University of the State of New York is approved and recommended by the standing committee on legislation of the Medical Society of the State of New York; it is, therefore,

Resolved, That this Society urge upon the senator from the 27th district, the Hon. J. Sloat Fassett, and the member of assembly from the county of Chemung, the Hon. J. S. Van Duzer, to use all laudable efforts, in the approaching session of the legislature, to secure the passage of the act mentioned in the foregoing preamble, which is made necessary in consequence of the great increase of medical graduates, who, in many cases, are insufficiently educated, who become a reproach to the schools which give them authority to practice, and bring discredit to the name and dignity of the profession of medicine.

There is in this calm and dignified statement, that which we believe to be the earnest of a quiet, well considered determination to put the hand to the plow, and not to turn back until the State Faculty is an accomplished fact.

Perhaps of more importance than any other of the events of the last month is the appearance, in the struggle for better

methods in the licensing of physicians, of the Committee on Legislation of the Medical Society of the State of New York.

Some of our readers may have wondered why a single county society was permitted to take the initiative in a work of this importance. The reasons for this the State committee now give in a circular letter, which they will soon address to the profession.

This letter is to be sent in connection with the bill, amended in accordance with the various timely suggestions developed by the correspondence incident to its introduction to the profession at large.

We have seen an advance proof of this letter and can say to our readers, that not only has the entire action of the committee of the local society been under the advice of the State committee, but the latter now comes to the front and throws its weight and the influence of the State Medical Society upon the side of the State Faculty bill.

But one more topic, and this case is brought down to date. We hear that the New York medical schools begin to realize that this is more than a passing shower, and that they have prepared a substitute for the State Faculty bill, a copy of which lies before us.

This bill seems worthy of notice for many reasons. Because it will be offered as a substitute for the one which has been before the profession for many months, and everywhere recognized as a measure framed in the interests of the whole profession, the strength of which is made more apparent by comparison with the substitute. Then the measure is of note because its appearance, at the suggestion of the medical schools, shows that the necessity for improvement upon the present methods of licensing physicians is imperative and acknowledged by all, that the only question is, as to how the remedy shall be applied. This proposed substitute is also of interest, because its provisions demonstrate that the habits of thought of its authors, do not permit them to embrace any interests beyond those of the corporations which they are engaged in managing.

The medical college bill follows the State Faculty bill in most of its provisions, making one important exception. In the latter all persons who propose to begin the practice of medicine in the State after November 1, 1884, must be examined and licensed by this faculty. In the substitute, this rule holds for all persons coming from without the State, but for graduates of our medical schools quite another rule obtains, and in this the bill and its alleged substitute differ widely. The medical college bill provides that any medical school in this State, about to hold its annual graduation exercises, shall so intimate to the State Faculty, which body shall at once dispatch three of its members as delegates, who shall attend such exercises; these delegates shall have the privilege of knowing what questions are to be asked the candidates for graduation and of reading their answers to the same, when such shall be in writing. When the exercises are over, they have the privilege of returning home and of reporting to the Regents the names of all such graduates as wish licenses to practice in this State, and upon such report, and the payment of a fee of five dollars in each case, such graduates shall be licensed by the Regents of the University.

How could anything be more considerate of the interests of our schools or more thoughtful of the feelings of our State Faculty? The latter have not even the trouble of asking a single question; they have simply to hear the question and its answer, or to read the same. Perhaps they may be called upon to attend a few faculty dinners in the meantime, and then go home with the sweet satisfaction of having discharged all the duty the law laid upon them.

And this is the way certain schools propose to answer the imperative demand of the profession, for the absolute, unconditional divorce of the teaching and licensing powers. We heartily thank these schools for giving us their whole mind upon the question, but have serious doubts about the substitute being an improvement upon the original; and improvements seem to be the order of the day.

Reviews.

Elements of Histology. By E. KLEIN, M. D., F. R. S., Joint Lecturer on General Anatomy and Physiology in the Medical School of St. Bartholomew's Hospital, London. Illustrated with 181 engravings. Philadelphia: Henry C. Lea's Son & Co. 1883.

In the words of the preface: "This work is intended as a manual for medical students. The original plan was to embody in it only such matter as was absolutely required for the first year's student in the medical school, but this plan was not carried out, since the book would then have been, in some measure, incomplete as a manual of histology. The work contains a good deal that will be acceptable to the advanced student as well as the beginner." This little work is one of a set of five manuals for medical students. It is a small 12mo. of 350 pages. Little works of this character and scope are exceedingly useful as giving the medical man, not a specialist, quite a complete understanding of such subjects as histology, pathology, etc. And they possess this additional advantage, that they will be read where works of a more comprehensive and exhaustive nature are laid aside for only an occasional reference. We recommend the little book in the same way as Green's Manual of Pathology, of which we have always had a highly favorable opinion.

A Manual of Pathology. By JOSEPH COATS, M. D., Pathologist to the Western Infirmary and the Sick Children's Hospital, Glasgow, Lecturer on Pathology in the Western Infirmary. President of the Pathological and Clinical Society of Glasgow. With three hundred and thirty-nine illustrations. Philadelphia: H. C. Lea's Son & Co. 1883.

The number of new books and new editions of old books on pathology which have lately appeared is an evidence of the increased interest in and study of this important branch of medical knowledge. The present work is one of the most valuable in any language, and may fairly be called a complete systematic treatise; and as the distinguished author has for years

been engaged as a practical pathologist, and in teaching large classes of students, he has succeeded in making the work not only thorough, but practical in its scope. For this reason it is peculiarly valuable to the general practitioner. We believe that it will take the first place in America, as it has in England, among the works upon this subject. The illustrations are excellent.

Elements of Surgical Pathology. By AUGUSTUS J. PEPPER, M. S., M. B., London, F. R. C. S., England, Fellow of University College, London, Surgeon to St. Mary's Hospital, and Teacher of Practical and Operative Surgery at the Medical School. Illustrated with eighty-one engravings. Henry C. Lea's Son & Co., Philadelphia.

We here also quote from the preface. The author says: "My aim has been to supply what has long been felt as a desideratum, a small work on surgical pathology suited to the requirements of students preparing for their final examinations. The following pages embody some of the conclusions arrived at after many years of study and teaching. An attempt has been made to render in a practical form the knowledge conveyed, and to give an explanation of the causes and methods of pathological processes." We have the same to say of this as of the preceding. It belongs to the same set and will be found a useful little book. It contains 500 pages, and many of the plates are original.

Clinical Chemistry. An account of the analyses of blood, urine, morbid products, etc., with an explanation of some of the clinical changes that occur in the body in disease. By CHAS. HENRY RALFE, M. A., M. D., Contab., Fellow of the Royal College of Physicians, London. Formerly Demonstrator, of Physiological Chemistry in the Medical School of St. George's Hospital. Illustrated with sixteen engravings. H. C. Lea's Son & Co., Philadelphia, Pa.

This is another of the excellent series of manuals for students of medicine published by the Leas. Like the others, it is an eminently practical work, furnishing students and practitioners with a concise account of the best methods of examining, chemi-

cally, abnormal blood, urine, morbid products, etc., at the bedside or in the laboratory. The value of such knowledge as is here given, to the student and practitioner, is daily becoming better recognized. It ought to be an important feature in medical education.

The Dissector's Manual. By W. BRUCE CLARKE, M. A., M. B., Senior Demonstrator of Anatomy and Operative Surgeon at St. Bartholomew's Hospital, Examiner in Anatomy, University of Oxford, Surgeon to St. Peter's Hospital, etc., and C. B. LOCKWOOD, F. R. C. S. Illustrated with forty-nine engravings. H. C. Lea's Son & Co., Philadelphia, Pa.

This is one of the most useful aids to the student of anatomy that we have examined. It gives very full and clear directions how to find the various structures, what the student ought to see and be familiar with, and what he will not see unless special modes of preparation are employed to demonstrate them. The book is one which we would highly commend.

The Physician's Pocket Day Book. Designed by C. HENRI LEONARD, M. A., M. D., Professor of Medical and Surgical Diseases of Women in the Michigan College of Medicine. Price \$1.00. Illustrated Medical Journal Co., Detroit, Mich.

The diary accommodates daily charges for twenty or forty families weekly, has complete obstetrical record for ninety-four cases and monthly memorandum for debtor and creditor cash account. It is one of the most convenient to carry in the pocket, being of convenient shape and small bulk.

The Medical Record Visiting List or Physician's Diary for 1884. New York: Wm. Wood & Co.

This is certainly the handsomest of the many diaries offered to the profession, and not a few think it is also the most convenient in its arrangement. The new book, for 1884, is out, and we would advise our friends to look at it before buying any other.

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Original Communications.

DYSENTERY.*

BY E. T. DORLAND, M. D.

It is a curious and interesting fact, confirmed by the concurrent testimony of medical observers from the age of Hippocrates to the present day, that the different seasons of the year are marked by an aptitude to certain determinate diseases in the human system. Nor is this any marvel, when we consider the numerous, great and sudden meteorological changes of the successive seasons, together with the corresponding diversities in the vast vegetable kingdom, with which we hold such intimate connection and relation. The conclusion is pressed upon us, irresistably, that the sensitive and wonderfully complicated organization of man cannot possibly exist in the midst of these ever varying circumstances uninfluenced and unaffected, but that for weal or woe it must be powerfully under their control.

Owing undoubtedly to the nature and degree of their changes, the same seasons in different years in similar latitudes vary widely from one another in the form, type, severity and mortality of their maladies. The same is true of the age, and occasion-

*Read before the Medical Union.

ally the sex of those whom they select for their victims. The severity varies so much, that while some are marked by nothing inordinate in these respects, exciting no disease but such as is readily amenable to medical treatment, or so mild, even as to pass by almost unnoticed, others are marked by the most appalling traits, generating complaints that bid defiance to the best directed skill of the most enlightened physicians.

Providentially removed from the sweltering heat and resulting pestiferous influences of the southern climes, and proportionately free from large cities, those great national curses, as they have been designated, which congregate poverty and vice, too often converting them into vast pest houses; it has been the good fortune of this part of the Empire State to enjoy a comparative immunity from those seriously malignant epidemic diseases. It does happen, however, at distant periods of time, that the otherwise steady current of health has been rudely interrupted; and, as if to take vengeance for past exemption, sickness and death have run riot in our midst.

Such was the case in the epidemic of dysentery that visited this city and the adjacent country in the autumn of 1853. I was located at that time at Buffalo Plains, as resident physician of the almshouse, and attended a large number of cases in that vicinity, as well as caring for all occurring within the institution itself. Being greatly interested in the cases as young practitioners are wont to be, and taking notes of every case at the time, I have felt that it might not be altogether unprofitable to present to this society a brief synopsis of my views of the diagnosis and treatment of dysentery.

It is true, the epidemic referred to occurred thirty years ago, yet I can state that the few typical cases that have come under my observation since that time have not changed the views then held of the true nature and proper treatment of this disease. Great changes and decided improvements in our materia medica have taken place since that day, but the indications of treatment remain the same, virtually unchanged by the lapse of time. I

will here state that I believe it to be conceded by most observers, that malignant epidemics of dysentery have commonly been preceded by an unusual prevalence of choleric maladies. In this instance, as you may remember, cholera raged here severely in 1852, and not a little during the summer of 1853, and it was on the subsidence of the cholera that the epidemic referred to made its appearance. I shall not, in this brief paper, attempt to treat upon the pathology of dysentery, assuming that you are all better informed upon that subject than myself, venturing to state, in passing, that I believe pathologists mainly agree that the affection consists primarily of inflammation of the solitary and sometimes of the other glands and follicles belonging to the intestinal mucous membrane. I propose to treat briefly of the symptoms of the mild and severer forms of dysentery, and the treatment appropriate to each. The milder I shall denominate dysenteric diarrhœa, and the severer, dysentery. The symptoms characterizing a case of dysenteric diarrhœa are, of course, modified somewhat by circumstances, as age, temperament, habits, etc. But as a rule, the following would be an approximate description, having reference especially to the epidemic of 1853, though applicable, according to my observation, to the disease in general, whenever and wherever found.

The first deviation from health, noticed by the patient, would be a moderate and not very distressing diarrhœa. Fever was absent in the majority of instances, and the pulse, skin, urinary secretion, tongue and appetite were very often nearly or quite normal, the only indication of derangement in the system being the frequent and loose stools, together with some pain or uneasiness in the bowels, felt principally just previous to an evacuation. The stools would be sometimes wholly fecal, and again partly fecal and partly mucous and blood. But usually within from three to five days either convalescence was established, or the case had developed into one of unmixed dysentery. I invite your attention especially to the marked difference in the condition of the system in the early stage of the two forms of the disease.

The symptoms characterizing a case of primary unmixed dysentery, experience would give as follows: A case of primary dysentery is often ushered in by a chill, followed in a short time by a febrile reaction of considerable severity. To these soon succeed a feeling of weight and distress in some portion of the abdomen, centering sooner or later about the pubic and left inguinal regions, while over these regions there is more or less tenderness on pressure. The febrile action, whether preceded by chill or not, is usually high and continuous with evening exacerbations; the appetite capricious, and oftentimes complete anorexia exists. Nausea is a common attendant, though vomiting, unless from over-burdened stomach, is rare. The tongue is generally, but not in all cases, coated. The coating is sometimes a light, thin, narrow strip only in the center, or a thin extended lining, of a white color; at other times the lining is thick and of a brownish cast, but very frequently there is little, if anything, abnormal in the state of the tongue. Some writer has remarked sagely, I think, that the state of the tongue is a poor index to the degree or extent of inflammation in the large intestines alone, although a good one generally in diseases of the small intestines and stomach. I am sure, in my own experience, that I have rarely seen the red, dry, parched appearance of that organ in genuine dysentery, though commonly so in inflammations of the intestinal tube higher up.

The alvine evacuations are numerous, thin and scanty; they are very variable in their color and composition, sometimes consisting chiefly of blood, then of mucous, then of blood and mucous intermixed, then of a yeast-like substance, and then again of a peculiar greenish matter, resembling lumps of flesh stained with bright green pigment. The last appearance is produced, according to some authors, by a mixture of coagulated blood and bile. Tormina and tenesmus are distressing symptoms. The pulse ordinarily continues accelerated, full and tense all through the earlier stages, unless the case takes on a sinking typhoid character. Other symptoms characteristic of inflamma-

tory affections in general I need not here enumerate, but pass on to the consideration of what I had more prominently in view when I began this paper, viz., the treatment. There were two opposing theories of treatment in vogue at the time of the epidemic referred to, and each was earnestly defended by leading practitioners of the day; one was the opium plan, and the other the purgative.

The purgative theory was taught and practiced by Prof. Austin Flint, and his success in treating this particular disease was considered by all, whether professional or non-professional, as anything but flattering. The same ill-success attended his treatment of cholera, which, as before stated, was very severe with us in 1852 and 1853. Dr. Flint held that both cholera and dysentery were primarily and principally due to an obstruction of the portal circulation. That the wicked liver was the chief cause of all the trouble; and holding that opinion, the sheet-anchor of treatment, with him, was calomel first, last and all the time, and in addition to the calomel, every two or three days a saline cathartic, or rhubarb or castor oil would be given. The use of opium, to any considerable extent, was deprecated on the theory that it tended to check the action of the liver and other secretory organs, and was prescribed only when pain was continuous and severe, or tenesmus extremely distressing, as an unavoidable necessity. And I find similar arguments used against the use of opium in dysentery by some modern writers, as, for instance, you will find in the "Dictionary of Medicine," by Quain (a recent work), a very full and able article on dysentery, its pathology and treatment, wherein the following statement appears in reference to the use of opium: "Opium, by the mouth, is seldom required. When swallowed it locks up the secretions of the liver, pancreas and alimentary mucous membrane, rather favoring than reducing the inflammation of the solitary and tubular glands. These bad effects counterbalance the benefits derived from the sleep, diminution of peristaltic action, and temporary decrease of tormina, etc."

Prof. Flint was not the only eminent practitioner who taught the purgative theory at that day. Professors Pitcher and Denton, of the Ann Arbor school, both taught it at the course of lectures which I attended there during the winter of 1853 and 1854. At that time the great body of American physicians were divided upon it, and it formed a sharp line of demarcation between the English and French schools of practice, the latter contending for, the former against it. Who shall decide where so many doctors disagree? It is not for me to assume the station of the umpire. I speak only for myself, and I would not, therefore, without reason, foist my notions of the subject on the consideration of the society. In the discussion of questions of so great importance as those involving the saving of human lives, we have a right to be outspoken in the expression of our opinions. There were, at that time, in Buffalo, many beside Dr. Flint who believed in the purgative theory. Dr. Pratt, my preceptor, told me that Dr. Barnes practiced that system for a while, and lost nearly all his cases. Their theory was that catharsis relieved the hyperæmic condition of the capillary vessels, and promoted the general secretions of the intestines, and as a consequence inflammatory action would be abated. It remains for me to describe the plan of treatment adopted by many of us, and which was certainly very successful, and which I believe to be the proper treatment of dysentery, in my judgement. It is of vital importance, when called to a case of supposed dysentery, to ascertain whether it be of the diarrhœal form, indicated by more or less fecal matter in the stools, an absence of any great constitutional disturbance, a preceding diarrhœa, etc., in which case very little treatment is usually required. Rest, a proper attention to the diet, which should consist mainly of milk, milk porridge, rice, mutton broth and the like, a free use of alkalies, some simple diarrhœa mixture with sufficient anodynes to relieve pain and control the peristaltic action of the bowels, makes up, as a rule, the sum total of treatment necessary for this form of the disease. But when called to a case of real typical dysentery,

as indicated by stools containing little or no fecal matter, high febrile excitement, much tenderness on pressure over the bowels, etc., as before described, our course of treatment was as follows : First a full dose of calomel, followed in a few hours by a dose of castor oil to empty the intestinal canal of all undigested food and fecal matter, immediately after which we put the patient upon full doses of opium, and from that time on it was opium first, last and all the time, the advocates of the opium plan of treatment believing it as absurd to claim that cathartics promote the secretion of the intestinal glands in the inflamed condition of dysentery, as that irritants applied to inflamed mammae promote the secretion of milk. On the contrary, we maintain that opium, beside relieving pain, procuring rest and controlling the peristaltic action of the bowels, really promotes secretion by diminishing the morbid sensibility of the bowels to the matters they contain, and thereby greatly relieving the spasmodic constriction of the vessels involved in the inflammatory action. But to return; the opiates, as the sheet-anchor of treatment, we continued as long as there was any considerable inflammatory action remaining, and almost invariably with the most happy results. Auxiliary measures, such as hot fomentations and turpentine stupes to the bowels, alkaline drinks, opium suppositories to relieve tenesmus, etc., were, of course, made use of whenever rationally indicated.

I claim it to be as logical to keep the system under the influence of opium in acute dysentery, as we all, I believe, concede it to be in enteritis.

From my own experience, and from the knowledge derived by observation of the experience of others, I fully believe the plan so highly lauded by some physicians, of giving frequently, in dysentery, cathartic doses of calomel, castor oil, magnesia, rhubarb, rochelle salts, etc., to be uncalled for, injurious and cruel, and therefore decidedly bad practice.

The rationale I present to you in conclusion, and as a "summing up of the case."

The purgative treatment is irrational; first, because it is diametrically opposite to that cardinal law of both medicine and surgery, derived from the example of nature herself, that injured and inflamed parts be kept in the most passive and quiescent state, and that the exercise of their functions be diminished as much as possible. Witness the complete rest enjoined in sprain of the ankle, or inflammation of the knee-joint, the prohibition of the use of the eye in ophthalmia, the suppression of noise and the exclusion of light in phrenitis, the forbidding of any article making requisition on the digestive powers of the stomach in gastritis, etc.

Secondly, because it is directly opposed to another law in medicine and surgery, which forbids the application of irritants to an already irritated surface. To this rule there exist only rare exceptions, which do not apply to the question under consideration.

Thirdly, because the administration of purgatives is very apt to have the effect, especially in persons of nervous temperament and weak digestive organs, to unsettle and nauseate the stomach and render it incapable of the retention of food. In compelling the patient to unnecessary stools, it must also contribute to harmful exhaustion and suffering.

And fourthly and lastly, because experience has pretty satisfactorily proved that those hardened fæces termed scybalæ, which were formerly supposed to exist in the bowels in nearly all cases of dysentery, and to dislodge which purgatives were originally employed, are found only in a few cases, and, when existing, their unaided and unprovoked passage is less disturbing and harmful than the action of cathartics.

Clinical Reports.

RUPTURE OF HEART.*

BY DR. C. C. WYCKOFF.

I was called Nov. 30, 1883, to Mr. R., aged sixty-nine years. I found him pale, hands and feet cold, pulse 80, moderately full and regular. He had just come into the house after walking a short distance; complained of some dull pain in the centre of the chest, a little above the region of the nipples. I found that walking brought on a very sharp pain in this locality. At that time he had never had pain in either arm, nor more on one side of the chest than the other. He said that he had suffered from these attacks of pain for a year or more, and that they increased in frequency and severity of late, but with the exception of the paroxysms of pain he had felt very well for the last few months, yet acknowledged that he had lost flesh. Until quite recently he had supposed he was suffering from indigestion.

Dec. 1st. He went to his place of business and worked most of the day at book-keeping, but had some attacks of pain.

Dec. 2d, Sunday. Remained in the house; had several severe paroxysms of pain.

I saw him the second time, Dec. 3d. He was then having constant pain, with occasional severe paroxysms, as before, in the upper part of the centre of the chest, which were only controlled by inhalation of chloroform.

Dec. 4th. The pain extended from the centre of the chest, each way, and down the arms and hands to the ends of the fingers. After the paroxysms of severe pain subsided, he complained of pain upon the left side of chest, but of more severe pain under right shoulder blade.

Subcutaneous injections of morphia, $\frac{1}{4}$ grain, were given, which would make him comfortable for about six hours.

* Read before the Buffalo Medical Association, February 5, 1884.

Dec. 5th. Morphia still necessary to control the pain. Dr. Burwell in consultation at 3 P. M. As the bowels were constipated, enemata were resorted to without effect. Five grains of calomel were given, and followed in three hours by three grains more, to be followed in six hours from the first dose by Hunyadi water, which had to be repeated several times. However, the bowels were comfortably and satisfactorily moved in about twenty-four hours after the first dose of calomel; after which, Dec. 6th, morphia, subcutaneously, was repeated, which gave the patient a comfortable night.

Dec. 7th. No severe pain; morphia in the evening, after which there were no paroxysms of severe pain.

Dec. 8th and 9th. Patient, on the whole, very comfortable. He had slight pain over the region of the heart, accompanied with hyperæsthesia of the surface of chest in the same region.

I saw him last at about half-past five P. M., the 9th. At that time his pulse was 96, regular, and heart sounds normal; appeared comparatively comfortable, but complained of an uncomfortable feeling on the left side of the chest. He had eaten some solid food about one o'clock, for the first time during his confinement, and with a relish. In about five minutes after I left him, his wife, sitting at the foot of the bed, heard what she described as a "gurgling sound." She spoke to him, but received no answer; she noticed that his eyes were turned up, but there was no movement of any portion of the body. She called a lady from an adjoining room, after which he only gasped once.

Autopsy: Made by Dr. Frederick Peterson, eighteen hours after death. Body well nourished and well formed; rigor mortis slight; head not examined.

Chest: Lungs normal, with exception of slight emphysema and hypostatic congestion; pericardium contained about 250 cubic centimetres (or 8 oz.) of dark blood and coagula. There was a rupture of the heart from above downward, near the septum in the left ventricle, some six centimetres in length. The

myocardium, to the naked eye, was extremely fatty, and under the microscope this fatty degeneration was corroborated, the fibres being almost destroyed. All about the place of rupture was deposited a thin layer of lymph upon the pericardium, showing that the rupture had been slowly going on for two or three days. There was no sign of endocarditis, nor of dissecting aneurism; no valvular lesions. The wall of the left ventricle seemed somewhat thinner at the point of rupture than elsewhere. Entangled in the edges of the ruptured spot, and protruding somewhat into the ventricular cavity, was a clot, dark and tough, of perhaps two or three days' existence. The coronary arteries were atheromatous to a great degree, and deforming endarteritis was also present in the aorta throughout its whole extent, and in the iliacs.

Abdomen: Spleen enlarged and hard, beginning cirrhosis of liver; right kidney weighed about 50 grammes; left was of normal size; both were hard, blue and granulous.

Diagnosis: Immediate cause of death, rupture of the heart, due to fatty degeneration and atrophy of part of the ventricular wall. Farther, chronic interstitial nephritis.

Remarks: Rupture of the heart most often occurs when there is, together with great general or partial fatty degeneration, a stenosis of the aortic valves. Such a case as this, where no aortic stenosis exists, is much more rare.

A CASE OF EXTRA-UTERINE PREGNANCY—DEATH—AUTOPSY.

BY EDWARD CLARK, M. D., Post Mortem Examiner.

A short time since, I was requested, by one of the county coroners, to make an autopsy on the remains of a woman who had died quite suddenly at her home on Elm street, in this city. On reaching the house, the attending physician was present, who gave me the following brief history of the case: He had been called to see her a short time before her death. She was suffering from intense abdominal pains, with all the symptoms of

collapse. He administered morphia to quiet the pain. She continued to sink rapidly, and died in a short time. Not being able to form a positive opinion as to the cause of death, and the fact that a rumor that she had been hurt, prevailed, made him hesitate about issuing a death certificate. Thus the case fell into the coroner's hands, and I had the opportunity to make an autopsy. When the abdomen was opened, a large amount of fluid gushed out, that looked like liquor amnii, which undoubtedly it was, as will be presently seen. Continuing, I found a large blood clot that had spread itself out between the omentum and abdominal wall. I removed the clot and carefully turned up the omentum, and was not a little surprised to find a foetus, apparently of about five months' intra-uterine development, lying face downward upon the coils of intestine. Hardly expecting to find a rupture of the uterus at so early a period of pregnancy, I continued my examination, curiously impatient to learn just what I should find. Raising up the foetus and following down the umbilical cord, my hand was led into what seemed to be a large laceration or rent, apparently posterior to the uterine fundus, from which the placenta was partially protruding. I removed the foetus, cord and placenta, and then proceeded to extirpate the uterus and its ligaments, together with a sac or cyst, which was attached to the uterus and broad ligament posteriorly, and to the right side. After its removal, I found the uterus enlarged and thickened, but perfectly intact. On section it was found to contain a well-developed decidua. In fact, the uterus and its contents indicated that nature had made every effort to have these parts keep pace with the development of the extra-uterine foetus. The left ovary was in a natural condition; the right had either been obliterated by the foetal sac in its growth, or else formed a part of its wall, I could not determine which. The sac from which the foetus had escaped was firmly attached to the posterior part of the uterus and the broad ligament of the right side, and considerable force was necessary to sever it from its attachments to portions of the intestines. The

most interesting question connected with extra-uterine pregnancy is that of diagnosis and treatment. If the nature of the case could be early recognized, it might be treated as an ordinary cystic growth of the ovary, or the foetus could be destroyed by the electric current. But is it possible to make a positive diagnosis after rupture of the sac occurs? If so, would we have time to operate before death? Lastly, is an operation advisable, or is death certain to occur in such a case as the one here reported? I would like to hear from some of my professional confreres in regard to the questions here presented.

DEEP ABSCESS OF THE POST-CERVICAL REGION, WITH SUDDEN DEATH.

REPORTED BY B. G. LONG, M. D.

Anna Z—, aged 12, of sound health and good family history, attended school regularly until the afternoon of December 17, 1883, when, on account of stiffness and soreness of the back of her neck, she remained at home. The family physician, Dr. Harrington, who was at the house to see another member of the family, suffering with bronchitis, had his attention called to the condition of her neck. But little was thought of it, as she was working about the house and only slightly inconvenienced.

Three days later, December 20th, he was called to see her, and found her neck, and especially the back of it, enormously swollen. It was very tender to touch, and she was suffering severe pain. Pulse 112; temperature 101°.

Poultice applied and anodyne administered. She grew rapidly worse. The swelling became more circumscribed and harder on the back of the neck. Consultation was held on the 22d, when a hypodermic needle was introduced into the tumor, but no pus found. Brain symptoms were very marked at this time, and an unfavorable prognosis was given. The only symptom of paralysis was a deviation of the tongue to the right side when protruded. Death occurred December 24th, at 1.30 P. M.

The consent of the parents to an autopsy was gained only by promising to open nothing but the back of the neck.

Autopsy twenty-two hours after death. Body moderately well nourished; rigor mortis marked; very great hypostatic congestion of back; a denuded surface on nape of neck where a blister had been applied. Nothing but marked congestion was found down to the spinous processes. Bulging from between the laminæ of the second and third vertebræ, mostly on the right side, was a fluctuating tumor which contained about one and a half drachms of pus. On removing the arch of the second vertebra, the dura mater was found intact; opening into the sub-arachnoid space disclosed a very large amount of serous effusion, the result of meningitis, which was the immediate cause of death.

Selections.

THE PREVENTION AND TREATMENT OF PUERPERAL FEVER.*

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* * * * *

Let us pause here and review the features in the condition of the puerperal woman which render her a prey to so many and dangerous disorders which spring up as consequences of utero-gestation and of parturition.

In the first place, her blood is in a condition of hyperinosis—that is to say, it contains a great excess of fibrin. If it be drawn by the lancet, it presents the buffy coat, upon which our forefathers laid so much stress, in the most marked degree; and from this arise two liabilities—first, a tendency in such blood to form thromboses in the heart and the blood-vessels, and, second, a tendency to prove a most prolific ground for the development of sepsis and zymosis. Measles, scarlatina, and varioloid, which

* Read before the New York Academy of Medicine, December 6, 1883.

give no very bad prognoses when they excite zymosis in the blood of the non-pregnant woman, commonly produce death when they act upon the blood of pregnancy.

Then the nervous system is in a plus state of sensitiveness and excitability, and influences which are very controllable in the non-puerperal state, produce very evil results here. For example, an accumulation of urinary poisons in the blood produces convulsions; an untoward moral influence produces violent mania; and crude ingesta result in severe spasmodic affections in the alimentary canal, which, in the same woman when not pregnant, would scarcely have attracted attention.

The local conditions which result from parturition are even more striking. The uterus and other pelvic viscera are, at full term, as fully supplied by lymphatics and lymphatic glands as is shown in this diagram;* and the arteries, veins, nerves, and other tissues of that organ, the vagina, the uterine ligaments, and the peritonæum have all undergone a rapid physiological hypertrophy, which permits of an organ only three inches in length ascending so as to touch the ensiform cartilage.

The uterus about the 280th day of gestation contracts and expels the child; then the placenta and membranes; and then closes its emptied cavity, and rests. Let us suppose that in forty-eight hours after delivery a primipara dies of pneumonia, and that we are allowed to lay open the genital tract and examine it from the fundus uteri downward. Outside all looks well; the uterus is merely much larger than in the non-pregnant state. Within, it presents a very different appearance; the whole endometrium, covered over by the greyish, sloughy-looking decidua vera, presents all over its surface an unhealthy, unclean and diphtheritic look, although free from exudation. Here and there shreds of membrane, consisting of small portions of the decidua reflexa, which had become adherent, appear, partially detached and somewhat decomposed. At one point the large placental site is seen, raw, irregular, and covered over by minute

* Here Dr. Thomas showed diagrams, which we omit for lack of space.—EDITOR.

traces of the placenta and small blood-clots which close the mouths of the uterine sinuses. The odor of the opened uterine cavity, the walls of which are thus covered, is disagreeable. The substances mentioned have for forty-eight hours been dislodging themselves and mingling with the pinkish fluid which pours like an unhealthy sweat from the placental site; constitute what is called the cleansings, or lochial discharge. Upon examining the cervix uteri, we find two or three small rents which pass through the mucous lining and involve to a varying depth the sub-lying parenchyma. In consequence of these injuries, and of absorption through them of the lochial discharge already mentioned, the cervix is swollen and œdematous. As we examine the vagina it will be found that the great distension impressed upon it by the head of the child in its passage to the vulva has in two or three places caused a superficial rupture of the mucous lining of this canal.

We now arrive at the vulva, and here we find several solutions of continuity which have been effected by the escaping head. The fourchette has been torn through, and this rent has extended through a small portion of the perinæum, and one or two small fissures have occurred in the mucous membrane covering over the ostium vaginae.

Were we to take some of the lochial discharge from the vagina, after the atmosphere has acted upon it, and, abrading the inside of the finger with a lancet so that it bleeds slightly, apply this freely to the denuded surface, and allow it to become dry there, its irritating character would soon become evidenced by a burning sensation in the part, a smarting extending up the hand, and on the next day signs of a slight local inflammation, with a little lymphangitis, would be noticed. This would probably last only two or three days—merely long enough to demonstrate the fact that the fluid is an irritating one, but not sufficiently poisonous to cause erysipelas or severe angeioleucitis.

The natural history of the ordinary local results of human parturition is given in the foregoing sketch. In every case of

child-bearing the endometrium is thus encumbered and freed by a process of exfoliation and sloughing ; in every case the cervix, vaginal mucous membrane, perinæum, and vulva are, in varying degrees, lacerated ; and in every case the offensive fluid, called lochia, poisons these freshly made, unprotected wounds. And yet what are the usual results ? Recovery, uniformly, I might say universally, unless some unusual occurrence manifests itself to prevent this happy consummation ! Theorizing about the matter, one would suppose that the mortality resulting from such a state of things must be excessive. Here we have a number of recent wounds constantly and unavoidably bathed with a fluid made up of dead and decaying animal tissue in a woman whose blood and nerve states are, with reference to septic disease, like flax prepared for the spark, and who is exhausted by pain, anxiety, loss of blood, and deprivation of sleep. Can one point to any concatenation of circumstances better calculated to insure a bad result ? And yet the facts are these : only about one or two in every one hundred parturient women ordinarily die when properly cared for during labor, even in the public hospitals.*

Recovery, then, is the very general rule after normal parturition ; death the very rare exception. But now and then all this is changed. Some ferment or specific poison gains access to the genital canal and acts as rapidly and as decidedly as a little yeast added to dough. In the latter case, active and immediate fermentation affects the whole mass ; in the former a set of striking, alarming, and often fatal phenomena occur, which spread dismay through the lying-in chamber and give an entirely new complexion to the progress of the case. The fact that this unfortunate occurrence has taken place will usually announce itself to the attending physician in this way. He leaves his patient on the morning of the third day cheerful, happy, free from pain, with a pulse of 85, and a temperature of 99°. He is called to her in the latter part of that day and finds that she has had a slight, perhaps a scarcely perceptible, chill ; that some pelvic

* Tarnier, "Report of Maternite Hospital," Paris.

pain has followed it ; that the lochia have ceased ; that the milk which was just showing itself has disappeared ; that a severe headache exists ; that a look of indescribable anxiety has replaced the happy expression of the morning ; that the pulse rate is 130 to the minute, and that the buccal temperature is 104° .

A poisonous element has by some method or other reached the genital tract, as fruitful a field for its activity as a mass of dough is for yeast, and the result is already manifesting itself. Let us suppose that the patient's medical attendant lays the flattering unction to his soul that all this is due to "malaria"; or that he soothes his troubled mind with the hope that it is "milk fever"; or that, recognizing the attack as one of "puerperal septicæmia," or "blood-poisoning of child bed," the first link in that terrible chain called puerperal fever, he relies upon medicines given by the mouth or rectum, what is usually the course shown as the natural one of the affection? Within a week, or thereabouts, for there is no rule as to this point, parenchymatous metritis, lymphangitis, lymphadenitis, phlebitis, cellulitis, or peritonitis will very probably develop itself, and what was originally merely a septicæmia will merge into one of these affections, and the patient will pass through the perils attendant upon whichever of these pathological states manifests itself as a consequence of the initial lesion.

Sometimes the septic disorder develops puerperal mania, while at other times a septic pleuritis, endocarditis, pneumonitis, pericarditis, or meningitis follows the systemic poisoning, the lymphatics emptying the deadly contents into the thoracic duct, and thus transferring them into the subclavian vein, as Lusk clearly points out. At other times the condition continues one of true and uncomplicated septicæmia to the end, death occurring from coma, or the patient succumbing to exhaustion from hyperpyrexia, which lasts for weeks. What was originally septicæmia, however, as a rule rarely remains so, but generally passes into some other disorder, and very generally into peritonitis, before a fatal termination occurs.

And now comes naturally the question, What is the pathology of that affection styled puerperal fever? An inquiry into the views which prevail among others would evidently require more time than I can possibly allot to it to-night; and yet I am desirous that my answer, even if very short, shall be so clear, succinct and simple as to convey perfectly the opinion which a practice of thirty years has impressed upon my own mind concerning a subject which has always deeply interested me, and in connection with which I have had abundant opportunity for study, both at the bedside and in the dead-house.

My observations have led me to adopt the views of those who believe that *puerperal fever is puerperal septicæmia*. It matters not whether it assume the form of metritis, phlebitis, cellulitis, peritonitis, or lymphangitis, the essence of the disorder is a poison, which is absorbed into the blood of the parturient woman through some solution of continuity, and which, in the appropriate soil of the puerperal condition, fructifies and produces the result known in its *ensemble* of pathological phenomena as puerperal fever. From my standpoint, the matter is well stated by Lusk * when he declares that "it has now passed beyond the domain of dispute that puerperal fever is an infectious disease, due, as a rule, to the septic inoculation of the wounds which result from the separation of the decidua and the passage of the child through the genital canal in the act of parturition."

As early as 1870, Hervieux, in his work on the diseases of child-bed, already alluded to, expressed himself upon this point in the following words: "Here I stand; if what I have said does not carry conviction of the truth of my doctrine, fuller explanation will fail to do so. I believe in the multiplicity of puerperal diseases. I believe in puerperal poisoning as the source of them. Here, in two words, my creed is presented."

In 1877 the Berlin Obstetrical Society appointed a committee on puerperal fever, consisting of Schroder, Lohlein, A. Martin Fasbender, and Boehr—men whose names are sufficient to com-

* "Midwifery," p. 608.

mand attention, even if their words fail to carry conviction. In its report this committee expresses its views thus :* " Under the names ' puerperal fever,' ' malignant child-bed fever,' are included a group of diseases occurring in child-bed which vary very greatly in their manifestations, but have this in common, that they are called into being by the absorption from the organs of generation of a material which gives rise to destructive inflammation and fever. There are, indeed, a number of substances, mainly composed of organic materials in a state of putrid decomposition, which, when brought into contact with an open wound, set up inflammation in it, which extends to the neighboring tissues ; a further absorption by the lymphatics and blood-vessels leads to more extensive inflammation among neighboring and remote organs ; and, when a large quantity is rapidly absorbed into the blood, a quickly fatal poisoning of the whole organism occurs. To surgeons the deadly effect of these materials upon wounds is only too well known, and the greatest advance, probably, which surgery has ever made consists in the so-called antiseptic method of treating wounds—that is, in the scrupulously exact removal of such materials from fresh wounds.

" Puerperal fever is indeed nothing else than the infecting of fresh wounds, such as are found in every newly delivered woman, with these destructive septic materials. Almost every woman, after labor, has small wounds on the external genital organs, which are caused by the passage of the child through this narrow opening, and in every newly delivered woman the inner surface of the uterus, from which the protecting membrane has been cast off with the ovum, presents a large wound surface. Thus, every newly delivered woman is liable to suffer from the dreaded infective wound diseases, which in persons wounded under other circumstances, are called pyæmia, septicæmia, wound-fever, blood-poisoning, purulent infection, etc., *so soon as suitable septic materials are brought into contact with the genital organs.*"

* * * * * * *

* " Report of Puerperal Fever Committee of Berlin Obstetrical Society," December 4, 1877, p. 9.

What is the nature of this subtle and deadly poison, which, entering like a ferment into the genital canal of the puerperal woman whose blood is hyperinosed, whose nerves are in a condition of hyperæsthesia, whose utero-placental vessels are partially open, whose cervix uteri, vagina and vulva are covered with fresh superficial wounds, and whose womb is pouring slowly forth a fluid composed of dead tissue, decomposed blood and recently exfoliated cells, gives rise to so much disturbance? What do we know of the poison? what is its natural history? what encourages its life? and what kills it, or cripples its activity?

Unfortunately, these questions cannot to-day be satisfactorily answered; but have such questions been any more satisfactorily answered with reference to scarlatina, measles, and varicella? German pathologists have proved that the presence of micrococci, more especially of the round bacteria, occurs so frequently in the pathological products of puerperal diseases as to lead to the conviction that they are important factors in reference to them; but this point, like many others connected with the influence of bacteria as morbid agents, is yet too unsettled for admission into a practical treatise like the present. * Inquiry into the matter is now being pushed with vigor in the laboratories of France and Germany, and we have, according to recent reports, a fair prospect of valuable and practical results.

But, even although we do not at present know the exact nature of the poison which proves the disturbing element in these cases, we surely know that some such toxic agent exists, and it behooves us to learn how to prevent its entrance into the genital tract, and how best to destroy its life or its activity if it should gain admission in spite of our care and watchfulness.

Whatever be the character of this agent, we know that there are *two, and only two*, methods by which it can reach the parturient tract and exert its baneful influence. First, it may be carried

* In reference to this part of our subject I would refer those interested to the chapter upon it by Professor Lusk, in his masterly book upon the "Science and Art of Midwifery."

to the vulva and into the vagina through the open orifice of that canal by the atmosphere, in which it floats as an impalpable substance; and, second, it may be carried to any part of the genital tract by the fingers of doctor or nurse; by towels or cloth laid against the vulva; by sponges used in washing; by instruments used in the delivery of the child, drawing of urine, or injecting the vagina; and from the bed-clothing and body-clothing of the patient which are in immediate contact with the sexual organs.

* * * * *

Prophylactic measures which should be adopted in all midwifery cases, whether they occur in hospital or in private practice:

1. The room in which the confinement is to take place should have the floor, walls, and furniture thoroughly washed with a ten-per-cent. solution of carbolic acid or mercuric bichloride, 1 to 1,000, and the bedstead and mattresses should be sponged with the same solution. Curtains, carpets and upholstered furniture should be dispensed with as far as possible.

2. The nurse and physician should take care that all their clothing, both under and upper, be clean and free from exposure to the effluvia of any septic affection. Should either of them have been exposed within a fortnight to the effluvia of such affections as scarlet fever, typhus, erysipelas, septicæmia, or the like, they should change every article of clothing and bathe the entire body, especially the hair and beard, with a reliable antiseptic solution; that which I prefer for this purpose is a saturated solution of boric acid.

3. As labor sets in, the nurse, having thoroughly washed her hands, cleaned her nails with a stiff nail-brush, and soaked them in antiseptic fluid, should administer to the patient a warm vaginal injection of antiseptic character; bathe the vulva and surrounding parts freely with the same; repeat this every four hours during labor; and keep a napkin, wrung out of the warm antiseptic fluid, over the genital organs until the birth of the child.

4. Before assuming the functions of their respective offices at the moment of labor, both doctor and nurse should wash the hands thoroughly with soap and water, *scrub* the nails with a stiff nail-brush, and soak the hands for several minutes in a bichloride solution, 1 to 1,000.

5. The first two stages of the labor having been accomplished, the third stage should be efficiently produced; all portions of placenta and membranes removed; and ergot administered, in moderate doses, three times a day, and kept up for at least a week, for the complete closure of the uterine cavity, expulsion of clots, and occlusion of the utero-placental vessels.

6. The doctor, taking nothing for granted, not satisfying himself with a vague report of the nurse, should, at the conclusion of the labor, carefully examine the vulva of the patient. If the perinæum be lacerated, it should be closed at once by suture, to shut up this avenue to septic absorption; and, should slight solutions of continuity be found in the labia or the vulvar extremity of the vagina, these should be dried by pressure of a linen cloth, touched with equal parts of sol. ferri persulph. and carbolic acid, again dried thoroughly by pressure with the cloth, and then painted over with gutta-percha collodion. If this be thoroughly done, absorption will be prevented at these points for at least three or four days, when the application may be repeated.

7. In six or eight hours after the labor, when the patient has rested, the vagina should be syringed out with an antiseptic solution, and a suppository of cocoa butter, containing from three to five grains of iodoform, should be placed within it, under the os uteri. A syringe with intermittent jet should be used, which will wash away with gentle force all blood-clots, and reliance should not be placed upon the feeble drip of the fountain syringe, the advantages of which are, I think, entirely theoretical.

8. These vaginal injections and suppositories should, in cases of normal labor, be repeated every eight hours; in cases of difficult or instrumental labors, twice as often; and they should be

kept up for at least ten days, the nurse observing to the last the precaution already mentioned of washing her hands before every approach to the genital tract of the patient.

9. When catheterization becomes necessary, it is safer to employ a new gum-elastic catheter, which before use should be thoroughly immersed in antiseptic fluid, and which should be destroyed at the conclusion of the case, rather than to trust to the nurse's cleansing of an old silver instrument which bears within it the register of a list of cases of septicæmia in which she has employed it during the past two or three years. *It is a very common and very bad habit for nurses to own silver catheters, which they carry about with them from case to case of midwifery.*

10. Last, but by no means least, let the physician inform himself by personal observation as to the competency of the nurse to syringe out the vagina thoroughly, to place the antiseptic suppositories just where they should be, and to use the catheter without injury to the patient. Neglect of this precaution has frequently resulted in leaving a fœtid upper segment of the vagina entirely unwashed, while the antiseptic stream was limited to the lower third of the canal.

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Before leaving this part of my subject, let me, in the strongest manner, record my protest against the use of intra-uterine injections as a prophylactic measure, except after very severe operations within the uterine cavity, which render the occurrence of septicæmia almost certain. As a preventive measure, to be uniformly adopted, I look upon it as to the last degree rash and reprehensible. The use of a dangerous remedy in combating the results of a dangerous disorder is always admissable, but a resort to a hazardous procedure for a condition in connection with which danger has not shown itself, and may not do so, should be viewed in quite a contrary light.

THE TREATMENT OF ABSCESSSES OF THE NECK.

Dr. John A. Lidell, in a very instructive article on this subject in a number of *The American Journal of the Medical Sciences*, points out that sudden death may occur from deep-seated abscesses of the neck, or the continuance of life may be greatly endangered, much oftener than is generally supposed; and that these abscesses in the neck are more frequently attended with hemorrhages due to the opening of important blood vessels by ulceration or erosion, and by *ramollissement* consequent upon the disorders themselves, than abscesses in the other surgical regions. The superior liability of cervical abscesses to the spontaneous occurrence of dangerous hemorrhages arises in part from the greater number and importance of the cervical blood vessels; but more particularly from the inanition and exhaustion, or low state of the constitutional powers, and consequent feebleness of the reparative forces, which rapidly result from most of the deep abscesses of the neck, or rather from the inability to swallow enough food to support life, and from the powerlessness to get any refreshing sleep, or even repose, with which these abscesses are oftentimes attended. The septic or toxæmic influence of the fetid secretions and exudations which present themselves in the oral and faucial cavities, in many instances, also aids materially to still further depress the patient, and weaken the reparative processes of his system. These deep-seated abscesses of the neck, when allowed to run their own course, do not exhibit any tendency to a spontaneous cure; but, on the contrary, they always tend to destroy life by burrowing or spreading, etc.; and Dr. Lidell shows that the earlier they are laid open and evacuated the better for both patient and surgeon. As soon as fluctuation is discerned, the abscess cavity should, without delay, be freely laid open, the coagula turned out, the bleeding point, or source of the hemorrhage, brought distinctly into view, and the delinquent vessel itself should be ligatured on each side of the aperture in its walls. But should

the ligatures cut through, the actual cautery must be applied to the bleeding point, the primitive carotid artery should be firmly compressed against the cervical vertebræ by the surgeon's thumb or fingers applied on the anterior part of the corresponding side of the neck, between the larynx or trachea and the inner border of the sterno-cleido-mastoid muscle, with force enough to press the artery backward and inward against these vertebræ, and flatten it thereon. Should this procedure fail, it will be advisable, especially in cases where the bleeding proceeds from tonsillary abscesses, to ligature at once the primitive carotid artery.—*Med. Record.*

THE TREATMENT OF MEASLES.

Dr. D. Maclean, of Glasgow, in the *Lancet*, calls attention to a method of treating measles, which has been found, in his hands, to meet with what he calls universal success.

As this disease is considered one of the zymotic class, two principal things must be considered in its treatment: (1.) The management of the ferment, or whatever it is; and (2.) the management of the effects of this ferment upon the system. The most marked of these latter present themselves in the effects of the ailment upon the mucous membrane of the lungs, and it is from its action there we have the immediate cause of the ensuing death, or the prolonged ill-health afterwards. The line of action to follow is: (1.) To relieve the congestion of the mucous membrane, which is the immediate cause of danger; and (2.) to destroy or reduce the violence of the disease itself. This, Dr. Maclean is in the habit of doing, he believes successfully, by giving (say to a child of two or three years of age) a teaspoonful, in water, of the following mixture, every three hours: ipecacuanha wine, half a drachm; syrup of squills, half an ounce; quinine, two grains; acetate of ammonia solution, to two ounces. The quinine is increased according to age. It may be necessary to add to, or modify, the form in which this plan of treatment is

carried out, as when the irritation or cough is persistently great, then the addition of a little tincture of hyoscyamus is all that is necessary. If the stomach is irritable, it may be necessary to omit the quinine from the mixture. But as it is essential that it be introduced into the system for the destruction of the ferment, it can be administered separately by giving it in powder, mixed with saccharated carbonate of iron, which diminishes the irritant action of the quinine that takes place when the drug is given alone.

This form of treatment for measles he regards good in all types of the disease, whether the attack be mild or severe, and more especially valuable when we have that dangerous form, in which the eruption is of a deep-purplish color, a form which is generally recognized as being the most fatal.—*Md. Med. Jour.*

TREATMENT OF PUERPERAL FEVER.

Dr. T. More Madden (*British Medical Journal*): Whatever other treatment may be required, the employment twice a day of warm antiseptic intra-uterine and vaginal injections, or still preferably of similar irrigations should never be omitted. The use of these to wash out thoroughly all septic matter from the cavity of the uterus is self-evident. At the same time, it is necessary to impress on the nurse the necessity of using the ordinary vaginal syringe with far more caution than is generally observed by ordinary midwives, so as to avoid the risk of injecting air into the open uterine sinuses, or forcing the fluid through the patulous Fallopian tubes into the peritoneal cavity. The precise antiseptic solution used in this way matters comparatively little so that it accomplishes its object of washing away all vitiated exudations or septic matter, and bringing about a healthier condition of the uterine walls and vessels.

The author had used, with almost equal advantage, weak solutions of carbolic acid, permanganate of potash, turpentine, tincture of iodine, sanitas and terebene; and when none of these

were at hand, had found an excellent substitute in simple chamomile tea. Care should be taken not to employ over-strong antiseptic intra-uterine injections.

[It seems to us better practice to withhold the intra-uterine douche till vaginal irrigation fails to control the high temperature. If the pyrexia does not yield within a few hours to the vaginal douche properly used, it is safe to assume that the uterine cavity is the source of infection. Its frequent and thorough cleansing is then imperative. But the cavity of the puerperal uterus should not be too hastily invaded. If the vaginal douche is capable of harm, intra-uterine injections are doubly so.]—*American Medical Digest.*

ANÆSTHETICS IN DISEASES OF THE KIDNEYS—DANGER.

Dr. Laurence Turnbull dwells upon the great importance of attention to the condition of the kidneys and examination of the urine when an anæsthetic is to be administered. Many deaths, unaccountable otherwise, are due to this cause. In diseases of the kidneys, the blood being loaded with urea, anæsthetics almost invariably produce coma and death. He enumerates a considerable number of deaths from ether and hydrobromic ether, but very few from chloroform. Norris has reported two cases of death supervening unexpectedly from sulphuric ether after operations for cataract. Both recovered consciousness but died comatose, one in a few hours, the other after 18 days; no organic lesion was found post mortem except Bright's disease. Cases have also been reported by Emmet, Hunt and Montgomery, verified by post mortem examination. The kidneys are the active agents in eliminating ether from the blood, and if they are unable to perform this office, and if the skin is cold, moist and inactive, death will supervene by accumulation of mucus in the lungs, or congestion of the brain, in true Bright's disease of the kidneys.—*Med. and Surg. Rep.*

SUCCESSFUL MIDWIFERY.

The most successful results ever obtained in the Maternité Hospital, Paris (a mortality of only $\frac{3}{4}$ of one per cent.), have been reached in the new pavilion, of which M. Tarnier says: "Each patient there has a separate room, entered from without, so that a nurse can only pass from one to another by going outside into the open air. The furniture is of japanned iron; the floors, walks and ceilings of impermeable concrete. The mattresses and pillows are stuffed with cut chaff, which is burnt after use in every single case. For the McIntosh sheet is substituted one of brown paper, made impermeable by pitch—this is burnt after use. For the washing of the genitals, weak solutions of bichloride of mercury are employed as being the best and most powerful germicide."—*Obst. Gaz.*

MEASLES.

Prof. Henock (*Ber. Klin. Wochenschrift, Phys. and Surg.*) reports the following: A four-year-old girl was sick with the measles. The eruption came on normally; but the fever did not abate. On the third day after the appearance of the eruption, the entire surface of the body was covered with blisters from the size of a hazel-nut to that of a dollar. The measles exanthem, which could be seen between these bullæ, were hemorrhagic. The whole face was greatly bloated, and the eyelids were so swollen that the eyes could not be opened. After the vesicular eruption ceased, the morning temperature fell to 37.8° C., but the evening temperature rose to 38.5°. The child was threatened with collapse, but revived. However, between the sixth and seventh days, croupous pneumonia set in, and, after eight days, terminated fatally. Similar complications have been reported by Klupfel and Steiner. Henock pronounces this a complication of measles with acute pemphigus.—*Weekly Med. Review.*

ACUTE DIFFUSE NEPHRITIS.

BY FRANCIS DELAFIELD, M. D.,

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GENTLEMEN—I was speaking to you yesterday of acute diffuse nephritis, and I called your attention to the fact that there were two different classes of cases characterized by different clinical histories. I told you that in the first group of cases the invasion of the disease was usually acute and the symptoms were developed rapidly, and at the same time there was a marked febrile movement.

We now come to the second group of cases of acute diffuse nephritis. In this set the invasion of the disease is not usually acute and well marked, but it is slow and gradual. There are no rigors and no febrile movement, and very often the patient cannot tell you the precise day on which the symptoms commenced, for they have begun slowly and gradually, and have increased steadily. In most cases the patients will tell you that they suddenly found they were beginning to lose their appetites and to be troubled with nausea, and some of them with vomiting also, though this is not a constant symptom. They then began to have pain in the back, of moderate intensity, and referred to the lumbar region. This, however, is always a very unreliable symptom, for perhaps half of all patients suffering from any of the ordinary diseases will tell you at some time that they have pain in the back. It is a very common symptom indeed. These patients find also that there is a loss of bodily strength and muscular force, and an indisposition to either muscular or mental exertion, and they do not feel in their ordinary mental or bodily condition. Then they notice, sometimes, at first, or in some cases not until after some time, that their urine is beginning to be diminished in amount, but this diminution does not usually reach any great degree. The patients pass, perhaps, twelve, or fourteen, or sixteen ounces in the twenty-four hours. This urine may be natural in color and appear-

ance, or it may be changed somewhat by the addition of a certain amount of blood. When we come to examine the urine we find that its specific gravity is low, although it is diminished in amount. Albumen is present in large amount, and we also find all sorts of casts present in very considerable numbers.

Dropsy is developed very early in the disease, and it regularly reaches a very considerable degree. If it is confined to the legs, they will become very much swollen, or it may involve the subcutaneous connective tissue throughout the body, and any of the serous cavities besides. The dropsy, then, is the most marked symptom in this class of cases.

Cerebral symptoms are generally almost altogether absent, or they reach no great degree of development. There may be some dyspnoea, but this is not excessive. The color of the patient changes, and the skin and mucous membranes become pale, and this is accompanied by a change in the composition of the blood.

These symptoms may all be developed during the course of a few weeks, and after this they last sometimes for weeks, and sometimes for several months. Then, after this condition has persisted for a number of weeks or months, there may be a gradual improvement in the condition of the patient; the appetite returns, the dropsy diminishes in amount, the urine increases in quantity, the albumen becomes less marked, the casts are less and less numerous, and the patient continues to improve until the dropsy has disappeared and he is able to be out and to go about again. But the anæmia does not disappear at once, but continues for some time after, and there will also be still a moderate amount of albumen and a few casts in the urine. Then, after a still longer time, these symptoms disappear also, and the patient is restored to his natural health.

But in other cases the course of the disease is not so favorable, for it continues to advance and becomes chronic, and then the patients go on and have the symptoms and lesions of chronic diffuse nephritis. This continuance of the disease is often sepa-

rated from the more acute stage by a sort of interval. That is, the patients first have the ordinary symptoms of acute diffuse nephritis of this particular variety, then, after a time, they get better, the dropsy disappears, and they only complain of feeling a little weak. But some albumen and a few casts usually remain in the urine. In other cases there seems to be an absolute recovery. This freedom from symptoms lasts for several months, perhaps, then the old symptoms come back again, the dropsy, the disturbances of the stomach, and the anæmia, all return and do not disappear again, but go on getting constantly worse and worse, until the patient finally dies at the end of several months. On examining the kidneys of such a patient, you do not find the changes of a simple form of acute diffuse nephritis, but they look rather as if they had originally been the seat of an acute diffuse nephritis which had afterward become chronic. So, after an apparent recovery, you must not be in too much of a hurry to dismiss these patients from your observation, for the symptoms may return after they have been absent for a number of months. Most of the examples of this form terminate in one of two ways—either they end in recovery, or else they pass on into the chronic condition.

The treatment of this group of cases is mainly directed toward diminishing the dropsy, and we may attempt to do this in the same way as in cases of acute parenchymatous nephritis. We may try the effects of cathartics and diuretics, and of sweating the patient, and see if by these means the amount of urine is increased and the dropsy diminished. If no effect is produced within a few days, then stop the treatment and wait a while, then try again, and, when the proper time has arrived, the remedies will act, the urine will increase, and the dropsy diminish or disappear. Then we have to attend to feeding the patient and to improving the condition of the blood in practically the same way as in acute parenchymatous nephritis. You will observe I have presented to you the symptoms of this set of cases of acute diffuse nephritis as the same as the symptoms of acute parenchy-

matous nephritis, and it must be confessed that in a large number of cases, during life, we cannot distinguish between these two diseases, for the symptoms are the same. Therefore the treatment is the same, and there is very much the same prognosis.

A considerable number of cases of acute diffuse nephritis occur in the course of scarlet fever, and thus become a complication of it. But you must remember that, with scarlet fever, acute parenchymatous nephritis is also a common complication. So, when you use the term "scarlatinal nephritis," you must do so remembering that there are these two forms of nephritis which may complicate a scarlet fever, an acute parenchymatous and an acute diffuse inflammation of the kidneys. There are apparently but very few cases of scarlet fever that run their course without the presence of either one or the other of these two forms of renal disease as a complication, and acute parenchymatous nephritis is the more common one, while the acute diffuse inflammation is the less common. There are also some cases of scarlet fever that run their regular course throughout, and you would never suppose that there was any accompanying disease of the kidneys if you did not examine the urine. But yet, when you do examine it, you find some albumen and a few casts, which are evidences of a parenchymatous inflammation. When, however, a diffuse nephritis is present, it does give symptoms, and there are not only changes in the urine, but also constitutional symptoms, varying in severity in different cases.

The precise time in the course of the scarlet fever at which the kidney lesion is developed varies a good deal in different cases, and we are unable to determine this just as we are unable to diagnosticate between cases of parenchymatous and diffuse nephritis. The larger number of these renal complications do not result in the death of the patient, and, as only a moderate number die, we cannot determine very often the exact nature of the renal disease. Taking these two sets of cases together, however, it is found that the renal symptoms may make their appearance at any period between the first day of the scarlet fever and

the ninth week after the invasion. But the great majority of cases occur on or about the fourteenth day of the scarlet fever, and next in frequency comes the twenty-first day, and next the seventh day. So, if we take all the cases of scarlet fever complicated with renal disease together, in most of them we shall find that the kidney complication is developed either at the fourteenth, the twenty-first, or the seventh day, and the most frequent of these is about the fourteenth day.

These patients give us first the ordinary symptoms of scarlet fever, sometimes severe in form and sometimes mild; for this complication seems to be as apt to occur with mild as with the severe cases of scarlet fever; and then, after the ordinary symptoms of the scarlet fever have lasted it may be for one, two, or three weeks or more, there is noticed a change in the condition of the patient—he is evidently worse, and a loss of appetite makes itself evident. If the renal disease is not developed until the fourteenth or twenty-first day, then very likely the patient will be feeling better of the scarlet fever, when suddenly rigors appear, and then, if the appetite has returned with the improvement in the scarlet fever, it will now be lost again, and there may be added more or less nausea and perhaps vomiting. In many cases there will, at this time, be developed a new febrile movement, and, if the fever of the scarlet fever is still continuing, it becomes higher than before, while if it has already reached the normal there will now be an increase of temperature, but the new febrile movement will not be of any great degree of severity. The patients will now begin to complain of pain in the back, and they will become fretful and restless and be unable to sleep well at night, and between these periods of restlessness and sleeplessness they will be unnaturally dull and stupid, and, if it is a grown-up person or a pretty old child, he will complain of headache. In bad cases there may be developed delirium, convulsions, and a very marked stupor, which may go on to complete unconsciousness.

Dropsy is developed, sometimes only to a very moderate extent, and sometimes there is very marked general anasarca. There are the ordinary changes in the blood, and the patient's appearance becomes anæmic. The urine is scanty or absolutely suppressed; it has a low specific gravity and contains some blood, and albumen is present in large amount, and there are numerous casts.

These symptoms, when once developed, last, in most cases, about two weeks, then all the symptoms begin to diminish, and finally they disappear altogether. The changes in the urine, however, continue for a considerable time after the patient has apparently entirely recovered.

The prognosis in most of these cases of nephritis complicating scarlet fever is good, and the patients get better usually after the second week. But sometimes the renal complication will be more severe in character, and prove fatal either at the end of a few days, or perhaps at the end of two or three weeks. Then in still other cases the acute kidney lesion changes into a chronic lesion, and it goes on and develops into a chronic diffuse nephritis.

As regards the treatment of these cases of scarlatinal nephritis, we find that some of them hardly require any treatment at all. The urine is not very much diminished and the symptoms are not very intense, and all that is necessary is to keep the child in bed and keep the bowels open with some simple laxative, and give it only a fluid diet, and then wait quietly for the symptoms to subside. But, in case the symptoms are more severe, it may be necessary to interfere, and we may apply cups or hot fomentations over the lumbar region, or sweat the patient and give more vigorous cathartics, and in some cases it is also necessary to give opium to quiet the extreme restlessness and sleeplessness. Then, when the symptoms subside, if the patient is pretty well nourished, no further treatment is necessary, but there may be a gradual return to animal food, and the opium may be with-

held. But, if the patient is not in good condition, then you must look after the general nutrition, and try to improve the condition of the blood in the ordinary way.—*N. Y. Md. Journal*.

WET PACK IN SCARLET FEVER.

Dr. A. F. Rundall, in *Medical Call*, speaks highly of this remedy. He says he always puts the patient in a wet pack, if called before the rash is thoroughly out, and before desquamation begins to take place, using water at the temperature of 67 to 70 degrees. The patient is left in the pack from half to three-quarters of an hour, and is given all the cold water he wants to drink. The pack may be repeated to reduce fever. He finds this treatment to act nicely in allaying fever and bringing out the rash.—*Md. Med. Jour.*

A SPECIFIC FOR SINGULTUS.

Says Dr. Henry Tucker, in *South Medical Record*: This very common affection, of infants and children especially, has a specific remedy, at least one which I have never known to fail. Moisten granulated sugar with good cider vinegar; give to an infant from a few grains to a teaspoonful. The effect is almost instantaneous, and the dose seldom needs to be repeated. I have used it for all ages, from infants a few months old to those on the down-hill side of life.

LATE TYING OF THE UMBILICAL CORD GIVES THE CHILD MORE BLOOD.

Dr. Edward Alcorn gives a resumé of the experience of various writers on this subject, which proves that the children whose cords are left uncut until after the placenta has been expelled thrive much better than those in whom it is cut before.—*N. Y. Med. Times*.

Correspondence.

BELLEVUE HOSPITAL MEDICAL COLLEGE AND THE CODE OF THE FATHERS.

(Letter from New York.)

Among the many curious phases which the code question has assumed during the past year's struggle in New York City, perhaps the most singular have been the vagaries pursued by the Bellevue Hospital Medical College, the standard-bearer of the Code of Ethics of the American Medical Association. No medical man who had watched the course of this school could repress a feeling of joy and pride that at least one college in the sink of iniquity, ycleped New York, had resisted the action of the anti-code poison which has permeated the profession of this city, and stood out bright and pure, a very beacon light in the midst of the ethical darkness which enshrouds the profession of medicine in New York State. But, alas! that we should be obliged to pull down the idol which our hands had reared; to tear down the bright but delusive image from the shrine in which pious and reverent hands had placed it. Alas! Bellevue is infected and in a more virulent form than the rest of the brethren. It is legalizing quacks by endorsing them, and here are the facts:

The first instance was the case of F. Eliseo Marini, who falsely claimed to have a diploma from the University of Naples, and in whom the Medical Society of the County of New York took a profound and almost paternal interest. So strong did this feeling become that the society arrested the said Marini in order to show him the error of his ways. First, in having an illegal diploma, and next, in not having it endorsed as required by law. Between the time of his arrest and his trial, he went to

Bellevue, the *deus ex machina*, and had his "diploma" endorsed. When the trial came off, it became necessary to subpoena the secretary of the college in order to prove that the endorsement appended to said document was genuine. This interesting foreigner was tried in two courts, at Special Sessions and at the Second District Police Court. At the former trial, the secretary of Bellevue Hospital Medical College testified that he had endorsed the document, believing the same to be a license, but he had no personal knowledge of its genuineness. At the second trial, the endorsement was admitted, but it was made, the secretary thought, upon the recommendation of Dr. Antonini, but as this gentleman was dead and the letter which was stated to have been written, endorsing Marini, had not been retained, this point was shrouded in mystery. Moreover, the singular statement was advanced that the signature was affixed, knowing that the instrument endorsed was a license and not a diploma. Now the law is explicit that diplomas may be endorsed, with certain qualifications, but licenses are not included, yet here admission is made that this man's paper, or whatever it may be called, was endorsed when the secretary knew that it was not a diploma.

Marini, on the first trial, was fined, but on the second, the presiding judge, a police justice, held that Marini was a legal practitioner, because his paper had been endorsed by the Bellevue Hospital Medical College, no matter what its former character had been. Supposing, therefore, that this ruling is correct, the Bellevue Hospital Medical College is directly responsible for legalizing a bogus document.

The second case is that of Siskind Treu, who is registered as follows: "Treu, Siskind, 16, Essex Board of Health, Cowne, Russia, 1862. Indorsed Bell, 1881." This turns out to be a nurse's certificate and not a diploma at all, so we are informed.

The third case is still more interesting, as it shows how good a doctor's endorsement of any given man may be. Within the past few weeks, New York City has been blest by the advent of

two "experienced physicians," who, urged by a philanthropic yearning to benefit those unfortunates who may be suffering from "blood and skin diseases," have opened a shop for the sale of the wonderful remedies known as S. S. S. One of these humanitarians registered as a graduate of Jefferson Medical College of Philadelphia, 1847; the other, of the Savannah Medical College, 1856, and were promptly endorsed by Bellevue, upon the recommendation of Dr. Bozeman, of this city, so we are informed.

Is not this terrible condition of things enough to send a pang of sorrow through the heart of every true lover of the code of our fathers: to think that Bellevue, the school whose proud headline in its advertisement reads that, "The standard of medical ethics recognized by this college is embodied in the code of ethics of the American Medical Association," and which declares as its invariable rule, that "the Faculty will not grant a degree to any graduate of three or more years' standing, who does not exhibit to the secretary a certificate of membership in some medical society entitled to representation in the American Medical Association," should so far lapse from the paths of ethical rectitude as to endorse a paper which the secretary admitted, in evidence, he knew was not a diploma; to endorse a nurse's certificate as a diploma, and to endorse the diplomas of two advertising doctors who sell a proprietary medicine. Oh! this is too, too much. Well may the stanch advocates of the dear old code exclaim: "Ichabod, the glory is departed from Israel."

OFFICE OF THE PRESIDENT,
AMERICAN PUBLIC HEALTH ASSOCIATION. }
WASHINGTON, D. C., Jan. 31, 1884. }

To the Committee on Legislation, Erie Co. Medical Society:

GENTLEMEN—I have read, with very great satisfaction, the copy of your proposed bill for the establishment of the Medical Faculty

of the University of the State of New York, for the regulation of the practice of medicine in that State, and I heartily congratulate your committee upon the admirable and effective scheme you have devised, and especially upon that feature of it which entirely separates your proposed Faculty from schools and colleges. I regard it as of the first importance, indeed, as absolutely necessary, in any undertaking of this kind, that the licensing faculty should be wholly distinct and independent from that which teaches; and I hope to see the day when examinations will be conducted and degrees conferred by a board or faculty which has no pecuniary or other interest in the size of college classes. It is out of the question to expect that men who stand in the relation of instructors can be impartially critical of the merits of candidates.

I cordially wish you success in a cause in which I have myself made some effort. Your State should lead in the matter of medical reform, and I trust that it is now about to set an example that will be followed and imitated all over the Union, with the effect of ridding our profession of the burden of ignorance, illiteracy and incompetence, which now disgraces it.

Very truly yours,

ALBERT L. GIHON.

Editorial.

THE OPPOSITION TO THE STATE FACULTY BILL.

“THE WORLD’S DISPENSARY” OF BUFFALO, THE BUFFALO MEDICAL COLLEGE, WARNER’S SAFE REMEDY COMPANY OF ROCHESTER AND THE BELLEVUE MEDICAL COLLEGE OF NEW YORK LEAD THE OPPOSING FORCES.

On Wednesday, the 23d ult., the joint committee of the Senate and Assembly gave a hearing to the opponents of the State

Faculty Bill, who were present in force and presented their case with so much eloquence and energy that the hours between 3.00 in the afternoon and 11.30 in the evening were consumed in the hearing. The advocates of the bill had previously presented their case, but were also invited to be present on this occasion, and some of them offered a few remarks. But it is to the motley crowd composing the opposition to the bill to which we would pay particular attention at this time; and we need only say that the advocates of the bill dignifiedly presented the plain and unanswerable facts and arguments which have again and again appeared in the JOURNAL, and which not only the profession but intelligent men of every class everywhere recognize as affording abundant reason for the passage of the bill.

Its supporters worthily represented the medical men of the State, and were fitly led by the Nestor of the profession, Edward M. Moore, M. D., of Rochester. At the hearing the Legislative Committee decided that the opponents of the bill should first be heard, and the friends of the measure should close the debate. We have not time to dwell upon it, but our readers will not need to be told that not only the argument but also the presentation of it was in delightful contrast.

Let us now turn our attention to the consideration of the opposition.

First, as to the opponents.

In almost every instance, men were there as representatives of institutions or societies, and the principal institutions arrayed against the bill were the World's Dispensary Association of Buffalo, by its President, Hon. Ray V. Pierce; the Medical Department of the University of Buffalo, by its attorney, Francis Lynde Stetson, Esq., of New York; Warner's Safe Remedy Co., of Rochester, by Dr. Henion; the United States Medical College of New York, by Dr. Robert A. Gunn, and Bellevue Medical College, by Professor Austin Flint, *Junior*. There were some other corporations present, but none of them took equal

prominence or consumed as much time as those we have cited. There are doubtless those in the profession who would deem this a strangely assorted company, who would be inclined to doubt their having any common interest or ground from which to oppose a bill supported by the medical profession of the State; but we are well informed that the arguments of the representatives of the different corporations were well nigh identical; there was the one refrain to be heard in each and all: We are manufacturers. Our factories are ample; our products please us and please the people. The demand for them is constantly increasing. We are the natural and the best judges of the superiority of our own productions, and we wish to be let alone. There were many attempts at variations of this discourse; there were appeals to past services, to ancestral advantages, to the shortcomings of similar factories in other places, but the variation soon ended in the refrain, we are very fond of ourselves and we wish to be let alone.

An unbiased layman, who heard the speeches, said to us that the opponents of the bill, by their own arguments, did more to strengthen the measure than even its own advocates, and that unless more convincing reasons were to be offered, the passage of the bill could be safely predicted.

But one more thought upon the opposition to the bill and we close.

To whom do the members of the medical faculties opposing this bill owe professional allegiance? At a remarkably full meeting of the Medical Society of the County of Erie, the bill is endorsed unanimously, but the fact seems to have no weight with the resident professors of one of our colleges. The medical societies of New York and Kings counties give the measure similar approval, and the fact is, in like manner, ignored by the men who grind at the larger mill. In conclusion, we again ask the question: To whom do the managers of these corporations owe allegiance?

Is it possible that personal selfishness and the desire for "filthy lucre" can stifle all nobler aspirations and sense of higher duties?

INSANITY.

The recent acquittal, on the ground of temporary insanity, of a young man charged with murder, and his subsequent examination and discharge by a commission of experts, recalls our attention to the subject of insanity, and leads us to express views long held, and which we believe can be maintained. The proposition which we make is as follows: Insanity, like most if not all other diseases not of traumatic origin, has no abrupt boundary lines. It merges more or less gradually into the ideally perfect mind on the one hand and the senseless idiot on the other. The ideally perfect mind, it has been truly said, does not exist; therefore, it follows that when, for practical purposes, the line must be drawn between what we will call practical sanity and incipient and slightly developed insanity, it is drawn arbitrarily, and the point upon which it is drawn depends equally upon the mind of the judge, his personal equation, and upon the mind of the judged.

This explains why we find that experts, equally qualified and honest, disagree—disagree so frequently that it is fast becoming proverbial. The sane of the one are the insane of the other. The melancholy or eccentric of the first party are the well-developed insane of the second. Thus, on this border-land, we have continual disagreement and contradiction. And from the nature of the case this, in a measure, must continue, if not for all time, at least until the pathological conditions of the brain and those indirectly effecting it are far more thoroughly mastered. What we desire to point out, however, is that this unavoidable fact has been ignored, in great measure, and that narrow and dogmatic opinions have taken the place of those wisely quali-

fied. A correct appreciation of them, and observance of this fact, must inevitably result in good, first, because it is in accordance with pathology, and secondly, because with this correct appreciation must necessarily be associated correct expression. To decide dogmatically whether, in a certain doubtful case, the abnormality has proceeded to the point where it must be called insanity is as unscientific and unwise as to insist that at some well-defined and absolutely determined point hyperæmia is suddenly changed to inflammation. It is by insensible gradations that nature, no less in pathology than elsewhere, glides from one condition to another. Thus we see perfect vision changed to astigmatism, comparatively perfect digestion to imperfect digestion or dyspepsia; in like manner slowly develops the want of correspondence between assimilation and disassimilation—locally in pathological new formations, generally in atrophy or hypertrophy; and thus it is throughout the domains of physiology and pathology; they touch at all points, and merge insensibly into each other. Insanity is no exception. There is no line or point of demarcation, and to determine the exact point where sanity ends and insanity begins is impossible, for the very good reason that what does not exist cannot be discovered. No more ridiculous would it be to appoint a commission of experts to determine the exact points in the rainbow or solar spectrum where the red ends and the orange begins, where the indigo stops and the violet bounds it. The laws of refraction prevent the one; those of pathology, the other.

Instead of the expression, "this man is sane," or, "this man is insane," the truth of pathology and the demands of society can only be correctly satisfied by substituting an opinion somewhat like the following: "The person whom we have examined does, or does not, show sufficient mental aberration that, in our opinion or judgment, society and he require and are entitled to mutual protection."

The separate question of responsibility, morbid impulse, etc., we reserve for a future number.

EDITORIAL NOTES.

WE call attention of our readers to the value of nitrogenized iron, prepared by Chapman, Green & Co., of Chicago. It is by far the most palatable of all the preparations of iron. We have used it extensively at the Buffalo Medical Dispensary and in private practice, with most excellent results.

DRS. HOPKINS and Mann represented the Committee on Legislation of Erie county before the Committee of the Legislature, to whom the bill was referred. Drs. Vanderveer, Sturgis, St. John Roosa and Lawrence Johnson were also at the hearing given by the committee to the advocates of the bill.

DR. J. S. JEWELL, Editor *Journal of Mental and Nervous Diseases*, and Professor of Mental and Nervous Diseases, Chicago Medical College, Chicago, Ill., says: "I have used Battle & Co.'s preparation known as Bromidia, and believe it to be as reliable as it is represented to be by its proprietors. I have thus far been pleased with its effects."

W. H. TIBBS is one of our most reliable and trustworthy druggists. Any promises he may make will be fulfilled. It is therefore worth while to any physician desiring to purchase surgical instruments, to look over his large stock, which he advertises for sale at a sacrifice to close out stock. It is an unusual chance to buy instruments at a low price.

C. H. HUGHES, M. D., Lecturer on Psychiatry and Neurology, Post-Graduate Faculty, St. Louis Medical College, Editor *Alienist and Neurologist*, St. Louis, Mo., says: "I frequently prescribe Celerina when I want to use a reliable compound of celery and coca, and the prescription has given me satisfaction in its results as a nerve-tonic in many cases."

WE call attention to the letter of Dr. Albert L. Gihon, President of the American Public Health Association, Vice-President American Medical Association, Medical Director United States Navy, etc., as another illustration of the sentiment of the best men in the profession on the subject of the State Faculty Bill. This is but one of the many letters constantly being received by the committee from distinguished men in hearty support of this measure.

THE attention of our readers is called to the original communication on dysentery, constituting the leading article in this number of the JOURNAL, as one well worthy of their perusal and favorable opinion. While expressing this approving criticism, we would yet call attention to the fact that much remains to be said, and we invite those who have anything to say, and who will do so briefly, to send us communications for publication in subsequent numbers.

THE prospects for the success of the State Faculty Bill are brighter than at any time since the initiative was taken by the Erie County Medical Society. It is a matter for profound regret to all the real friends of the oldest medical college in Buffalo, that its faculty should not have bravely led the van with the County Society in the battle for the advancement of the best interests of profession and people. No little credit is due, however, to that member of its faculty who has been a member of the Committee on Legislation and has worked with energy for the success of the bill.

WE have received, through Prof. George E. Fell, of the Committee on Publication, a copy of the proceedings of the American Society of Microscopists, at its sixth annual meeting, held in Chicago, August 7, 8, 9, 10, 1883. The volume comprises 275 pages of matter, consisting of papers from eminent microscopists of this country and a list of members of the society. The paper and typography, and its general appearance, are highly creditable to the Publication Committee, and also to Messrs. Haas & Klein, of this city, from whose establishment it was issued. The society, of whose work the present volume is an exponent, is the only organization of its kind, either here or abroad, which devotes its labors exclusively to subjects wherein the microscope is the essential agency or instrument in investigation and study. The work, therefore, is all the more creditable, and places our scientists in the front rank of earnest investigators. We regard the society and its labors with great pride and favor, and trust the medical profession will continue to encourage earnest work in this important field, and to study the results, which, in skillful hands, the microscope is bringing forth.

Reviews.

Sanitary and Statistical Report of the Surgeon-General of the Navy for the Year 1881. Washington: Government Printing House. 1883.

The present volume is the usual report issued by the medical department of the navy. Its contents are valuable to the profession. We have a criticism to make in regard to the binding: Such a work should be presented in better dress. Our government can well afford to send forth the reports of investigations of disease, of the able body which comprises its medical and surgical staff, in a style of binding and paper which would raise them above the form in which the political speeches of members of Congress are usually presented.

A Digest of Materia Medica and Pharmacy, Forming a Complete Pharmacopœia, for the use of Physicians, Druggists and Students. By ALBERT MERRELL, M. D., Professor of Chemistry, Pharmacy and Toxicology in the American Medical College, St. Louis, Mo., member of the State Board of Health of Missouri. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St. 1883.

The object of the author of this volume, as stated in the preface, is to present a condensed statement of such essential facts, pertaining to each drug therein described, as will form the ground-work for their rational employment in the treatment of disease.

The work is divided into two parts, the first treating of pharmacy, and the second of materia medica. Under these two heads, the author aims to give the latest opinions of medical agents and their preparation, and much that is new in regard to their physiological action. He also endeavors to distinguish between the poisonous and the curative action of the drug, and to indicate the abnormal condition in a tissue or organ which constitutes the physical expression of the disease.

The work forms a valuable addition to our library, and will be an important guide to the practitioner in the study of the preparation of drugs and of their action and application in disease. As such we commend it to the profession.

The Principles and Practice of Surgery: Being a Treatise on Surgical Diseases and Injuries. By D. HAYES AGNEW, M. D., LL. D., Professor of Surgery in the Medical Department of the University of Pennsylvania. Vol. iii. Philadelphia: J. B. Lippincott & Co. London: 16 Southampton Street, Covent Garden. 1883.

This is a volume of between seven and eight hundred pages, containing over five hundred illustrations. The fourteen chapters are upon the following subjects: Surgical Diseases of the Larynx and Trachea; Diseases and Injuries of the Nose and Naso-Pharyngeal Region, and the associated parts; Diseases and Injuries of the Eye and its Appendages; Diseases of the Ear; Malformations and Deformities; Tenotomy in the Treatment of Orthopædia; Affections of Muscles, Tendons, Bursæ and Aponeuroses; Surgical Affections of the Nerves; Surgical Affections of the Lymphatic System, Skin and Subcutaneous Connective Tissue; Syphilis; Tumors; Diseases of the Mammary Gland; Electricity in its Application to Surgical Therapeutics; Operations for Nerve Stretching and Massage. This volume concludes the work at which the author has been engaged for a period of five years. The illustrations are in great part original. It is a beautiful work, and needs but to be seen to confirm the high estimate so generally entertained regarding the author. The illustrations are especially interesting and valuable, for the reason that the vast majority are original and exceedingly well chosen. They illustrate many points in Pathology and Anatomy, in a manner such as we have scarcely, if ever, seen elsewhere. The text, also, is lucid, concise and to the point, showing the work to be the digest of the writer's mind and not simply a compilation and storehouse of the work and thought of others. To all this must be added the great advantage of being well up to date, and including the most recent discoveries and advances.

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Original Communications.

SOME USES OF NITRO-GLYCERINE.*

BY CHARLES G. STOCKTON, M. D.,
Professor of Materia Medica, Niagara Medical College.

Mr. President and Gentlemen of the Medical Club:

Those among you who had the privilege of listening to the instructive paper on angina pectoris, read before this body at its meeting, Nov. 9, 1881, by our associate, Dr. Hopkins, heard the following :†

“The pulse, as you would suspect, is always changed, but in a way that requires critical examination for its detection. My observation is that the principal alteration in the pulse is in its volume. In patients with whose circulation we are reasonably familiar, we see that the pulse, instead of being full and soft, is small and resisting, and tells at once of a contracted artery.” Again, “upon the theory that vaso-motor spasm exists as a factor of angina pectoris, a remedy which acts by relieving the spasm suggests itself as being directly curative. All the cases I have seen published go to show that when given in angina, nitro-glycerine acts uniformly and beneficially. I have given

* Read before the Medical Club, February, 1884.

† Buffalo Medical and Surgical Journal, Dec., 1881.

it in several cases of lead colic, and have found the high arterial tension peculiar to that condition to be relieved, and that with this improvement, the pain and constipation also disappear."

After reading the articles in the London *Lancet* for 1879, to which Dr. Hopkins referred, I felt convinced that we possessed in nitro-glycerine an agent with which we might successfully oppose arterial tension that results so frequently from varied pathological conditions.

Accordingly, the drug was used as opportunity afforded, and part of my experience I purpose reading to you to-night.

Observers are in accord that the action of nitro-glycerine resembles closely that of its congener, amyl nitrite. They both produce remarkable arterial relaxation—a chocolate-like color of arterial blood, a depression of the motor nerve centres and the pneumo-gastric, and muscular paresis.

Nitro-glycerine departs from the similarity in this, that it is slower and more prolonged in its action; it does not act as positively to lower animal temperature; the resulting arterial relaxation and flushing of the face is not so pronounced as is the case with nitrite of amyl. Without speculating over all the physiological actions of nitro-glycerine, it would perhaps be profitable to formulate our knowledge, as regards its effects upon the circulatory system.

1st. It has a direct paralyzing effect upon the muscular coat of the blood vessels, especially the capillaries, producing relaxation of these, widening of the area *vāsculosa*, thereby directly lessening arterial tension.

2d. While this action is peripheral, it undoubtedly is assisted by a similar accompanying centric influence, from depression of the vaso-motor centres.

3d. There is depression of the inhibitory powers of the pneumo-gastrics, and, as a result, the heart beats more rapidly while respiration becomes slower, death ensuing from asphyxia.

To state it in another way, we have from the influence of this agent great vascular relaxation, with increase of heart action,

the efforts of the heart arising, partly, from the sudden capillary dilatation, the increased blood supply to those vessels making the heart labor to supply itself, and partly from the loss of the inhibitory function of the pneumo-gastrics.

Nitro-glycerine appears to be quite uniform and constant in its manifestations. You are aware how successful it proves in angina pectoris, and it has been employed with gratifying results in spasmodic asthma, bronchitis, sea-sickness, reflex-vomiting, whooping cough, migraine, epilepsy, the cold stage of intermittents, acute and chronic Bright's disease, and numerous other affections.

About two years ago I first gave the drug to a patient whose case I shall briefly describe.

Case I. Miss H. is a laundress, aged 30 years, a hard worker, and one having much responsibility. Nine years since she began to have pain over the apex of the heart. Sometimes this continued for a few days, sometimes for weeks. She became progressively worse. After three years the left arm, shoulder and finally the side became numb,—sensation was impaired in the parts.

The pain was associated with dyspnœa. The seizures were occasionally abrupt. She fell to the ground senseless and pulseless. Stimulants always afforded temporary and limited relief.

She received nitro-glycerine, $\mathfrak{M}_i$ of a one per cent. solution in alcohol. The dose was increased, day by day, until she took $\mathfrak{M}_{ij}$ t. i. d., and was promptly tranquilized and relieved from pain. Afterwards she took $\mathfrak{M}_i$ at night for a certain period of time, and called herself well. Eventually the disturbance returned and she took at last $\mathfrak{M}_{vii}$ at one dose with good effect.

Her bottle becoming empty, she was given an order to repeat the prescription, did so, and of the new preparation took $\mathfrak{M}_{vii}$ —and then concluded that her end was at hand.

The face was flushed, turgid, eyes suffused, cardiac pulsations forcibly felt throughout the body, she was weak, almost without muscular control, but the most prominent disorder was cerebral.

She said she "thought the top of her head was coming off, and could feel it jerk up with every throb of the heart."

In this case there is no sensible lesion. I have heard at times a slight pre-systolic murmur, which was not evident when the attack subsided. The spine is irritable, likewise the track of the fifth and sixth intercostal nerves, otherwise the woman is healthy. How may we account for the different strengths of the solutions taken? I satisfied myself that the patient was not deceived in the dose. The pharmacist said that the last bottle was filled from a new package from another druggist, marked the one per cent. solution. Now I have discovered that there are in the shops two preparations, one of which is the one per cent. and the other the ten per cent. solution, and I shall always believe that my patient had the latter, and took seven-tenths of a grain of nitro-glycerine at a dose, the equivalent to seventy M of the common solution. This appears to me as a very important matter.

Case 2. About this time, at the Church Home, was an old lady of over 90 years, who nourished poorly, was constipated, suffered from pains all over the body, had dyspnœa, was unable to sleep quietly, and was very unhappy. There was marked arterial tension, and slow pulse. An extensive arcus senilis was present. The condition of the heart I have forgotten, for of this case I have no notes. She was given Mj of the one per ct. sol. of nitro-glycerine, and was improved. The pulse became softer and quicker, she ate, slept, and expressed herself as feeling better than for a long time. During the remainder of her days she had occasional recourse to nitro-glycerine, and always with benefit.

Case 3. Soon after, I was invited to prescribe for Mr. P., an old gentleman of 83 winters, an American by birth. I learned that he had felt as well as usual upon going to bed the night before, but when wakened in the morning, upon attempting to rise, he fell back fainting, and remained in a semi-unconscious condition until my arrival. I found him with a somewhat weak

but tense pulse, the radial arteries were felt to be hard under pressure, showing unmistakable signs of degeneration. The heart sounds were feeble. There was a systolic murmur, probably aortic in origin; the mitral valves seemed to me intact. He exhibited a most remarkable arcus senilis, and undoubtedly suffered from a form of vascular degeneration of old people; the immediate cause of my summons being an attack of syncope, depending upon his weakened heart and narrowing of his cerebral blood vessels. Having given some stimulants, which his stomach was not disposed to retain, I sent for and administered ℞ of one pr. ct. sol. of nitro-glycerine, with the happiest result. He felt better immediately. The following day he was able to sit up a little, but continued his remedy in ℞ doses, for a few days. A week after, he walked six blocks to my office without great fatigue. His pulse was full and softer, his expression was good, and he was as loquacious as usual. He stated that he had discontinued his medicine one day, but feeling his old symptoms returning, again resorted to it with the former result.

Nine months afterwards my patient was in usual health, and had taken none of his remedy for a long time. The question may be asked, would not stimulants and tonics have acted as well? Possibly, but they could have acted no better.

The last two cases referred to were lean old people; my next case was a fat old woman; and it seems to me worth while to pause here and emphasize, by considering the probable conditions of these patients.

Sir James Paget speaks of the "withering and the fatty degenerations."

He says: "Some people, as they grow old, seem only to wither and dry up; sharp featured, shriveled, spinous, old folk, yet withal, wiry and tough, clinging to life, and letting death have them, as it were, by installments, slowly paid. Such are the lean and slippered pantaloons; and their shrunk shanks declare the pervading atrophy. Others, women more often than

men, as old, and as ill-nourished as these, yet make a far different appearance. With these, the first sign of old age is that they grow fat; and this abides with them till, it may be, in a last illness, sharper than old age, they are robbed even of their fat. These, too, when old age sets in, become pursy, short-winded, pot-bellied, pale and flabby; their skin hangs not in wrinkles but in rolls; and their voices, instead of rising 'towards a childish treble,' become gruff and husky."*

I have quoted these lines because the great surgeon has described, better than I could hope to, those types of cases in which I have had the most experience and success in the use of nitro-glycerine.

It is unnecessary to remind the members of this body, that in the onward march of degenerations, vascular atrophies often occupy the front rank; that these progress until the vessels are unequal to meet even the "diminished requirements of nutrition." Is it not largely owing to this lessened nutrition, this tissue starvation, that we have the pains, the miseries, the unhappiness so constant with the aged? And if this is so, may we not, by the use of an agent that relaxes the tension of these degenerated vessels, allowing the blood to flow easily and abundantly through its courses to the sterile tissues, alleviate many of the sufferings and make smoother the downward path to the grave of those who exclaim with Lear:

"You see me here, you gods, a poor old man,
As full of grief as age; wretched in both?"

These thoughts are suggested, because I have had occasion to notice that such cases as those above described are never done telling of their ailments; and I have observed that nitro-glycerine, in some instances, has added much to the comfort, if it has not prolonged the life of these people, by helping the organs to maintain a condition more consistent with the exercise of their functions.

* Paget's Surgical Pathology, p. 82.

Case 4. Celia P., an English woman, aged 80 years; a typical case of fatty degeneration. I think her weight was considerably over two hundred pounds, and she was not tall. Having labored down stairs to her dinner one day, she fainted. I found her half an hour later, pulseless, cold, gasping, unable to speak. Stimulants were administered; later, digitalis and strychnine. She rallied a little, and with the assistance of two strong men, I got her to bed. It was with the greatest difficulty that life was maintained by means of the remedies above mentioned. After the lapse of several days, she was given nitro-glycerine. The improvement was prompt, decided and progressive. She enjoyed her life for some months afterwards, but only with the use of her medicine. Whenever it was discontinued, the patient quickly grew worse, nor could we supply the place of nitro-glycerine. I should like to recite the history of several other cases almost precisely like the foregoing, but I hesitate to occupy your time. I am positive that none of our usual remedies possess such conspicuous advantages as this in the treatment of such cases as I have described. In the hospital of the Erie County Penitentiary, I tried the effects of nitro-glycerine in a variety of cases with varying results.

Case 5. Pat. D., alias "Paddy the Pig," about 50 years of age, man of all work in a second-class hotel. Had had a hard spree, and came in poorly nourished and somewhat frenzied. His face and lower extremities were very oedematous, expression cyanotic, much dyspnœa, evidently general venous engorgement present. Area of precordial dullness excessive. There was a loud systolic murmur over the aortic valves, which seemed to depend upon regurgitation. He was treated in the usual way, and made general improvement, except as regarded the circulatory system. After the lapse of a week he was given nitro-glycerine, one drop of a ten per cent. solution. Almost immediately he became partly deaf, but his dyspnœa was relieved, and the arterial and venous circulations seemed pretty well balanced. After much difficulty, a specimen of urine was obtained. It was

found to contain traces of albumen, the specific gravity was 1.025. Paddy's anasarca did not improve, although his appetite did. In addition to the foregoing treatment, he was given the fluid extract of convallaria, without benefit. At last, tonics, with bandaging of legs, relieved his dropsy, and when discharged, three weeks later, his heart sounds were almost normal. His deafness disappeared with the discontinuance of the nitro-glycerine.

Case 6. To another man suffering from dilatation of the heart, with supposed aortic stenosis and mitral insufficiency, having a small, irregular, compressible pulse, I gave nitro-glycerine, with bad results. After the third dose of three minims of the one per cent. solution, he suffered so from dyspnoea, headache and general distress, and the heart was so tumultuous in its action, that the drug was withdrawn.

Case 7. To a man of sixty, who appeared to have pyelitis (which diagnosis was afterwards disproved by the microscope and who really suffered, I suppose, from urethral fever), I gave nitro-glycerine to relieve arterial tension. This it accomplished, indeed, but with so much prostration, accompanied with vomiting and hiccough, that the treatment was changed.

Case 8. Myalgia, accompanied with weak heart, hot head, cold extremities and impaired digestion, was benefited by nitro-glycerine.

Case 9. One of seminal emissions with a weak, intermittent and excitable pulse, was not improved by the drug. His face flushed, his head ached, he felt miserable. There were numerous other similar experiments made, in which it was hoped that, by relieving the opposition to the arterial current, by relaxing the capillaries, the heart action would become less labored, nutrition improved and functions restored. I have seen no real good from nitro-glycerine in migraine, although I have employed it in three cases that I thought well selected. Hammond, before the New York Neurological Society, Oct. 4, 1881, eulogized the drug, in what he termed, the "angio-spastic form

of migraine," and stated that it would be contra-indicated in "the angio-paralytic form." Perhaps my cases were "angio-paralytic." But the doctor refers to a case which was "angio-spastic" on the one side, and "angio-paralytic" on the other, cured almost instantly, after a long failure with other treatment. Paradoxes are excusable in nervous diseases. Dr. Hammond also states that in status epilepticus, and some other forms of epilepsy, when bromides are not efficient, nitro-glycerine is very effective.*

The use of the drug in epilepsy was first suggested, I believe, by Mr. Robson, F. R. C. S., Leeds, in the *British Medical Journal*, April 10, 1880. This gentleman also reported a series of eight interesting cases of chronic Bright's disease, and of others, accompanied by that condition of the vessels which was described by Sir Wm. Gull and Dr. Sutton. In speaking of the arterial tension present in these cases, he says: "Whether it be due to chronic kidney mischief, or to arterial fibrosis, this condition is unquestionably relieved by nitro-glycerine, and, with the diminution of pressure, in my experience, improvement invariably follows, though, in some cases, it may only be temporary.†‡ Mr. Robson also suggests the use of nitro-glycerine in the vascular tension of the aged. Dr. Turnbull and others have reported favorably of its effects in sea-sickness; various authorities praise its action in asthma and neuralgia. This drug, which has been before the profession for over twenty years, has received, I venture to assert, less than its deserved recognition. Perhaps this has in part arisen from its well-known dangerous properties in an undiluted form. It is said to be perfectly safe in an alcoholic or ethereal solution, or in chocolate tablets, or pills. The latter have to be chewed before swallowing, it is stated, else their activity is liable to remain latent. It was suggested by some wag that, before leaving packages of this medicine with a patient, they

* New York Medical Record, Oct. 22, 1881. Virginia Medical Monthly, Oct., 1881.

† British Medical Journal, Nov. 20, 1880.

‡ Boston Medical and Surgical Journal, Jan. 10, 1884.

should be labeled, "*explosive, with care, containing dynamite.*" To summarize, I think I can safely say that the proper administration of nitro-glycerine uniformly produces vascular relaxation; and as vascular tension is a prominent factor in diseases of the circulatory and nervous systems, the drug is destined to a much more extensive use than it now enjoys. From my own experience I know it to be especially applicable in abbreviating or preventing attacks of angina pectoris, in restoring the normal vascular resistance in kidney diseases, and in alleviating many distressing symptoms of arterial degeneration in the aged.

Clinical Reports.

AN OBSCURE AND INTERESTING CASE OF BRIGHT'S DISEASE
DIAGNOSED BY AN OPHTHALMOSCOPIC EXAMINATION—
NEPHRITIC RETINITIS PRESENT—DEATH SIX
DAYS AFTERWARDS.

REPORTED BY DR. GROVE.

Some of the diseases pertaining to the kidneys are so insidious in their progress that all methods of examination which can discover the origin or direct the physician to the source of mischief should be borne in mind. It is not the purpose of the writer, at this time, to consider the relation of albuminuria in general with nephritic retinitis, but rather to show very briefly the assistance which can be rendered by an ophthalmoscopic examination in masked cases of Bright's disease. When anasarca exists, it is surely a common-sense practice in all such cases to examine the urine. If, then, albuminuria is present, the attention of the physician is directed to the proper channel and some progress, at least, in diagnosis is the result. But in a small per cent. of cases, no œdema even is present and the patient may complain only of cephalalgia, anorexia and a "weak stomach." It is under just such circumstances that the medical attendant is

often befogged, and depending on symptoms alone fails to discover, for a time at least, their essential cause.

Schweigger of Berlin, in his lectures on the ophthalmoscope, says, in substance, that in those cases where anasarsa is absent, the patient is often thought to be suffering from biliousness. In eight to ten per cent. of the cases of Bright's disease, there is more or less deterioration of vision, and the amblyopia is often the first cause to alarm the patient. The presence of nephritic retinitis is discovered with the ophthalmoscope and discloses a condition of affairs unknown to the patient and not even suspected by the medical adviser. It is true certain tumors of the brain, more especially of the cerebellum, cause a form of retinitis very much like that depending on Bright's disease. The history of the case allows one, however, readily to differentiate, while the examination of the urine lends an additional corroborating evidence. Why the retina should sympathize with certain affections of the kidneys, and such a characteristic retinitis be produced, is unknown. One theory is that the urea which fails to be excreted interferes with the nutrition of the retina, causing the peculiar degeneration of its tissue. On the other hand, the tension of the aortic current which is so decidedly increased in most cases is given as the explanation. The conditions attending various cases render either idea tenable.

The following case is reported, since it seems to possess some features of unusual interest. On the first day of Jan., 1884, Mr. B—— consulted Dr. Storck, and gave the following history: Aged 37, and unmarried; muscular and always enjoyed good health. During the past six months has been unduly exerting himself in his business as "agent on the road." Has used intoxicating drinks rather freely and smoked excessively. In the early part of last July suffered for the first time from a severe frontal headache. Has had these "aches" occasionally since, but never considered them of any moment.

At present, Jan. 1st, the patient complains of general malaise, some frontal headache and anorexia. Has a great thirst and

drinks much water. Can retain but little solid food in stomach; and then with considerable distress. Has no pain bodily but rather restless. Complains of poor vision and occasionally has diplopia. The diagnosis made was nervous prostration complicated with dyspepsia. Tonics, sedatives, and stomachic correctives were prescribed, and the patient advised to consult the writer in regard to his eyes. Jan. 17th, 9 A. M., I saw patient for first time in office. Found lids and all portions of conjunctiva in apparently normal condition. Pupil was rather small, which prevented a satisfactory examination by ophthalmoscope. Wished to dilate pupil with atropine solution, but patient preferred to wait until evening. The field of vision was not restricted for either eye. Tension of eye-balls normal.

V. O. D. $\frac{20}{100}$, but after decided effort $\frac{20}{80}$.

V. O. S. $\frac{20}{200}$, but after decided effort $\frac{20}{100}$.

7 P. M., one drop of an atropia sulph. solution (gr. i to aquæ $\mathfrak{z}$ i) instilled and patient advised to call to-morrow morning.

Jan. 18th, 10 A. M. Patient called for examination, expecting afterwards to visit place of business. The pupil was about twice as large as normal, and the examination with ophthalmoscope presented an exact picture of advanced retinitis albuminuria. On close inspection of orbital conjunctiva a slight effusion was noticed, and the lids, perhaps, were somewhat puffy. There was no œdema in any part of the body and no pain or soreness over the region of kidneys on pressure. The V. O. U. had now decreased to that extent so that fingers were only visible ten feet away. The patient complains of becoming easily exhausted after slight exertion and inability to retain anything on stomach. Bowels move once a day, but only about one-half the normal amount of urine passed daily. The patient was advised to return home immediately and "take to his bed." A sample of his urine was obtained and the examination showed the following:

Acid in reaction, light straw color—sp. gr. 1.010, albumen present, which, after settling, showed a bulk of about one-third of urine in test-tube. No sugar or hyaline casts found.

The result of the examination was reported to Dr. Storck, the family physician, and during the afternoon we visited the patient together. We found him restless but complaining of no pain—temp. $101\frac{1}{2}^{\circ}$, pulse 120 and strong. On pressure over right kidney some soreness present.

Perfect rest in bed was enjoined and hot poultices around the body over the region of the kidneys ordered. *R.* A pill of *resina podophyll.*, calomel and digitalis. Also, bromidum potassium as sedative.

Jan. 19th. Rested better last night and can retain some nourishment. Pulse 100, temp. 100° . Bowels opened four to five times in past twenty-four hours and about eight ounces of urine passed in same time; skin dry; ordered hot bath.

The urine acid—straw color—sp. grav. 1.010; albumen present.

Jan. 20th, 10 A. M. Pulse 80, temp. 99° . Some pain for the first time on pressure over region of kidneys. No œdema of extremities or elsewhere. *R.* Potassæ acetatis gr. ten every three hours.

5 P. M. Pulse 80, temp. $98\frac{1}{2}^{\circ}$. Patient very restless and will not retain external applications in place. Stomach will not tolerate medicine or nourishment. The urine acid and sp. gr. 1.010. The same amount of urine voided as on previous days and the same amount of albumen present.

Jan. 21st, A. M. Dr. Wyckoff was called in consultation. Emesis of all nourishment and medicine continues. V. O. U.=fingers at seven feet. *R.* Bismuth gr. v, calomel gr. 1-10 dry on tongue every two hours. Also, potassæ acetatis gr. v with infus, Digitalis $\mathfrak{z}$ i every two hours.

P. M. Stomach in better condition, for some nourishment is retained. Temp. normal, pulse 90. The urine acid sp. gr. 1.010 and albumen to the same amount as yesterday present.

Jan. 22d, A. M. Rested fairly during night. The vision remains about the same.

P. M. Complains of feeling dizzy for the first time, and a numb sensation in extremities of fingers. The amount of urine

voided is not increased. It is of a very light color, acid reaction and sp. gr. 1.005. Pulse 88 and temp. $98\frac{1}{2}^{\circ}$.

Jan. 23d, A. M. Dr. Wyckoff again present; patient restless, and stomach very irritable. The urine very scanty and the last sample voided at 2 A. M. It is acid in reaction; sp. grav. 1.010. There is much pain on pressure over kidneys, light straw color. Not so much albumen present as in yesterday's specimen.

At 11 A. M., sedatives and nourishment were given per rectum.

4 P. M., patient has had two hours of sleep, but on awakening complains of dizziness. Skin is moist, pulse 120, temp. $98\frac{1}{2}^{\circ}$. Bladder contains no urine.

11 P. M., Dr. Storck passed catheter and found no urine.

Jan. 24th, 5 A. M. Death occurred without convulsions. No post mortem, unfortunately, was obtained. The urine voided for the past four days, and especially that passed on the 22d, did not have the odor of normal urine, and after standing for a few days even the smell was not unpleasant. This was owing, of course, to the retention of the greater portion of the urine in the body, which did not allow by decomposition the ammonia compounds to be found in the urine voided.

A CASE OF ANGINA PECTORIS.

Reported by P. W. VAN PEYMA, M. D.

On the night of December 3, 1883, I was called by a midwife to attend Mrs. M., aged 27 years, in her first confinement. The position of the child was occiput posterior, with the head well engaged. The delivery required the use of forceps, and was accomplished with considerable difficulty. The child was dead. After delivery a tumor, the size and consistency of an ordinary orange, was observed to the left of the fundus uteri. The connection of this tumor with the uterus was not established. The midwife informed me that she had remarked its existence two or three months previously. Subsequent to the

parturition, during a period of about ten days, the patient suffered from suppression of lochia, general abdominal tenderness, high temperature, etc. At the end of two weeks, however, she was restored to ordinary health, the tumor having also disappeared. During an interval of three weeks she continued in good health, attending to household duties and making occasional visits to her friends. Early in the morning of February 5th, the lady's husband called at my office, saying that his wife had been ill since the previous evening and was suffering severely from pain in the region of the stomach. I prescribed opium and belladonna in moderate doses and promised to call later in the day. My visit was made about 11 A. M. The patient, I was informed, had taken two or three doses of the medicine prescribed, but had, so far from being relieved, become much worse. On reaching the bedside all present, including myself, were astonished at her appearance, and I believed that she was dying. The lips were pale. The pulse and heart-beat could not be determined. The respiration was limited to an occasional slight gasp, any one of which I thought might be the last. The eyes were glassy and insensible to the touch of the finger. The extremities were cold. After having remained at the bedside about ten minutes, I noticed that the respiration had become a little more frequent and regular, and some effort was made towards reviving the patient. After another interval of ten minutes the cardiac sounds were faintly heard, (the action of the heart being regular and unaccelerated,) and later these were determined to be perfectly normal. At this time commenced recurring spasmodic expiratory cries. The pulse now became perceptible and the general condition improved so rapidly that upon leaving, an hour later, I was confident of speedy recovery. I may here say that my diagnosis at this time was hysteria, though I was obliged to admit that I had never seen a case so severe.

My next visit was made about 1 P. M. The patient was so far restored that she conversed freely and rationally with me regarding the symptoms experienced since the previous evening. In

her own words: "I was preparing supper, feeling quite well, when suddenly it seemed as if something flew right to my breast, and immediately I felt a severe pain in the stomach and breast. This lasted all night with hardly any interval of comparative ease." I was informed by her, as well as by her acquaintances, that she had never experienced any similar ailments, having, however, been frequently sick with various diseases, such as variola, typhoid fever, etc. At this visit nausea was the only remaining indication of ill-health, and I considered the patient as entirely out of danger and practically recovered. The husband reporting later in the afternoon that he had been unable to obtain the urine, which had been requested for the purpose of analysis, I promised to call about 5 P. M. Upon reaching the house, shortly before six, I learned that the patient had had a recurrence of the symptoms of the morning, and with fatal results, she having died only a few minutes before my arrival. An autopsy was refused.

In the light of all the events I have no hesitation in considering the case as one of angina pectoris. The paroxysmal nature; the character and situation of the pain; the spasmodic, or perhaps forced, character of the respiration as consciousness returned, expressing a sense of suffocation; the pinched and anxious features; the pallor of countenance; the coldness of extremities; and the condition of the heart, all point towards that obscure disease, or group of diseases, known as angina pectoris.

And, yet, as has been remarked, the case was, at one of its stages, mistaken for one of hysteria. In numerous particulars, too, the case presents exceptions to the rule. According to the statistics of Sir John Forbes, reported in "*Reynolds' System of Medicine*," of eighty-four cases, only eight were in women. Also is the case an exception to the rule laid down by the same authority in that the majority of the cases occur in connection with the gouty diathesis, and in that "angina is an attendant rather of ease and luxury than of temperance," "on which

account it is more frequently met with among the rich, or in persons of easy circumstances."

In this connection we wish also to call attention to the leading article of this number of the JOURNAL on glonoin, or nitro-glycerine, and to a paper published in this JOURNAL in 1881, written by Dr. H. R. Hopkins, on the subject of angina pectoris in its relation to arterial tension, as studied by the sphygmograph.

Selections.

TREATMENT OF PUERPERAL SEPTICÆMIA.

Let us now suppose that, in spite of every precaution, the specific poison has gained entrance at one of the numerous doorways left open in the genital tract between the vulva and the fundus uteri; what are the most reliable means now known to us for checking the advance of the septic disorders which are set up in consequence?

But let me stop here, before answering the question just asked, and explain what I mean by the use of the term specific poison. I do not believe that there is, necessarily, any specific disease germ which gives rise to *puerperal* septicæmia! It is probably the same germ as that which is the source of septicæmia, phlebitis, and lymphangitis in the stump after an amputation, in the wound created by a compound fracture, or in the lacerated tract produced by a gun-shot. But the pathological condition excited appears to me to be entirely different from that putrid absorption which results from the decomposition of a retained placenta, or a putrid mass of blood. Such decomposition produces a toxæmia, violent and dangerous it is true, but which disappears as soon as the offending mass is removed. That of the true puerperal disease at once, or almost at once, diseases the lymphatics and sets up an action which often proves uncontrollable. If the mere presence of decaying animal material in a uterus

would produce puerperal septicæmia without the agency of a specific disease germ, we should surely have that affection developing in healthy country localities where the women are attended by ignorant midwives, but where, nevertheless, it is almost an unknown disorder.

"I," says Hervieux, "who write these lines, declare that in my own country I have within the space of three years attended one thousand cases of labor, and out of that number have lost only one patient!"

And now, in summing up what I esteem the most certain and the most rational treatment of the disease styled puerperal fever, I will be as concise as possible.

As soon as the patient is stricken by the poison, certain very marked phenomena usually develop themselves with great promptness. After a chill or a slight horripilation she is affected by a high temperature, pelvic pain, considerable mental perturbation, headache, pain in the back, and sometimes, though not commonly, by nausea and vomiting. We will assume, first, that the attack is a severe one in its inception; and, second, that the patient is in such a position in life that we are not in any way hampered in our efforts to save her by considerations of economy. Having considered treatment from these standpoints, it will, of course, be easy to modify the plan so as to meet the requirements of a mild attack or of a scanty purse.

As the practitioner sits by the bedside of his patient at the commencement of her attack, he is aware that there are points connected with its true pathology which he cannot yet determine. For example, he cannot say whether the case is going to assume the form of septicæmia lymphatica or septicæmia venosa; whether of perimetritis or parametritis; or whether thrombosis of some of the large pelvic or utero-ovarian vessels, or a true parenchymatous metritis is to play the most active part in the siege which has begun. If he fritter away the golden moments in vague speculation; if he soothe his fears by hoping that the attack is due to malaria or milk fever; or, if he cast aside the rational doctrines of to-day in favor of the idea of a

general infectious and particular form of disease called by the forefathers of the French school, "*la fièvre des femmes en couche*," time will be lost which can never be regained. If, on the other hand, he is encouraged by his clinical observation to stand with many of the best pathologists and practitioners of our time in the position assumed by Hervieux—"I believe in the multiplicity of the affections classed under the head of puerperal fever; I believe in puerperal poisoning as the source of them"—he will act at once and strike at the poison before it has fairly gained a foothold. In other words, if the physician could see into the future and learn with certainty that peritonitis, cellulitis, thrombosis, lymphangitis, or true phlebitis is to be the final disorder, he should, if he reaches the case at the inception of the attack, follow, in my opinion, the course here formulated:

1. As soon as a diagnosis of septicæmia is determined upon, all pain, nervous perturbation, shock, and mental anxiety should be quieted by the hypodermic administration of ten minims of Magendie's solution of morphine, unless some special and very decided idiosyncrasy with reference to opium be ascertained to exist; and throughout the severity of the attack, whenever suffering of mind or body occurs (perhaps it will be about once in every six or eight hours), this should be repeated. In my experience, no other method of administering morphine in these particular cases compares with this, and, as it is not to be continued long, there is no fear of causing the patient to become addicted to the drug as a vice. If a small, sharp, and new needle be used, if it be thoroughly cleansed with soap and water before each time of using, and be dipped in a solution of bichloride, 1 to 1,000 of water, just before each insertion, no abscesses will occur. It is the large, rusty, unwashed and unpurified needle which the doctor's economy makes last him for many months, which so commonly results in them.

2. The physician must now decide whether, in his opinion, the septic disease which is developing has originated in the wounds situated between the os internum uteri and the vulva, or in the endometrium, above the former point. If he decide in

favor of the former view, he should persist, for a time longer, in the more thorough use of vaginal injections; if of the latter, intra-uterine injections should be at once resorted to. Usually the question has to be decided by the efficacy or inefficacy of frequent germicide vaginal injections in bringing down the temperature and controlling other grave symptoms. Should the failure of these seem to prove that the origin of the disease is higher up the genital tract, more decided and radical measures must be taken.

The patient having been entirely relieved of pain and thoroughly quieted, the first injection should be practiced in this way: An Indian rubber cloth should quietly, without hurry, noise, or disturbance on the part of the nurse, be spread over the edge of the bed on which she lies, and made to fall into a tub of warm water rendered antiseptic by the addition of 2 or 2½ per cent. of carbolic acid, or of the bichloride of mercury, 1 to 2,000, or of some other reliable germicide. Then Chamberlain's glass uterine tube, which I here show, or the very excellent and ingenious tube invented by Dr. George H. Lyman, which is here seen, thoroughly fitted to a Davidson's or Higginson's syringe, should be immersed in the tub. The nurse now aiding the patient by the shoulders, and the doctor by the hips, she should be gently laid across the bed and be made comfortable with a pillow under the head. Each foot should rest upon a chair placed at either side of the tub, and she should be entirely covered over with a couple of blankets. The doctor, now placing himself between the knees of the patient, should take the tube in his right hand while a stream of water is made to flow through it by the nurse, who squeezes the syringe bulb, and he should pass it gently up the fundus of the uterus. The stream of water, which has been steadily flowing, is now projected with gentle force against the walls of the uterus, washing away adherent blood-clots, detaching portions of hanging membrane, and everywhere neutralizing the influence of the poison which has excited the disorder.

After the first injection, the position of the patient need not

be disturbed, but the injections may be given as she lies upon a bed-pan.

In some cases, in which I have had reason to suspect that portions of the placenta or membranes have been retained, I have chloroformed the patient, passed the hand, rendered thoroughly aseptic, within the cavity, and very gently scraped off adherent masses from the uterine walls, using the nails as a curette, as Wilson, of Baltimore, has advised. In some other cases I have rubbed the whole endometrium with an aseptic sponge, held in a long sponge-holder, or employed the largest of my curettes to remove clots and adherent secundines, with great apparent advantage.

That the use of antiseptic uterine injections after parturition is attended by danger is beyond question. The greatest hazard attending this plan is the entrance of air into the uterine cavity; the next, the production of hemorrhage by detaching some of the thrombi which fill the mouths of the uterine sinuses; the third, the danger of forcing the fluid used as an antiseptic directly into the general circulation, through the introduction of the tube into the mouth of a sinus; fourth, the creation of convulsions, violent pain, or nervous prostration, by a sudden and baneful influence upon the nervous system; and the fifth, the passage of the tube into a Fallopian canal, and the injection of fluid directly into the peritoneal cavity, as in a case reported by Dr. W. Gill Wylie in an interesting paper in the *New York Medical Journal* for June 23, 1883, p. 679.

All these dangers may be, to a great extent, avoided by care as to details, by using a large injecting tube which cannot enter an open-mouthed sinus; by using water warmed to 105°; by injecting the fluid through the tube so as to exclude air before passing this up to the os uteri; by using only a moderate degree of force in throwing the jet against the uterine walls; and by proceeding with the whole affair gently, cautiously, slowly, and intelligently.

The tube should never be allowed to fill the os uteri completely, so as to prevent the escape of the injected fluid. Should

the cervical canal be so narrow as to hug the tube closely, it should be dilated by dilators of hard rubber, by the fingers, or Barnes' bags, before the injection is practiced.

A solution of the persulphate of iron should always be at hand in case of sudden hemorrhage from displacement of a thrombus. Should this accident occur, ergot should be immediately given hypodermically, the iron solution be at once added to the antiseptic solution and allowed to pass into the uterus, and pressure be made upon the fundus so as to stimulate the contraction of uterine fiber to accomplish closure of the open sinuses in that way.

Quite a number of cases of death from this plan of treatment are on record. In a very large experience with it I have met with but one. The whole number on record would, however, fall, I think, into insignificance if weighed in the balance against the many deaths which have been due to a neglect of the means, or against those lives which have been saved by it.

After all, the question as to the dangers attending a plan of treatment are not to be settled upon mere abstract reasoning. The evil which it is known to do must be weighed in one scale, and the good which it effects in another; and careful consideration must decide whether we are justified in accepting the former for the sake of the latter. Judged in this manner, I feel very sure that intra-uterine injections for perperal septicæmia deserve a place among the most valuable resources for the saving of life for which we are indebted to modern pathology.

The frequency of these intra-uterine injections should vary greatly with individual cases. In mild cases of septicæmia, where the temperature comes readily down after the uterus has been washed out, and rises very slowly, they need only be used once in every five hours; in other cases they become necessary once in every three hours; and in bad cases they are required once every hour. These injections should always be administered by a physician, should always be carried fully up to the fundus uteri and should always be used with every regard to caution as to detail which has been already mentioned.

Many prefer the use of those syringes which allow of a steady

flow of a stream of water propelled by gravitation, as is the case with the so-called fountain syringe, which is so popular among us. This is partly because greater safety is supposed to attach to these, and partly from a theory that danger attends the propulsion of a stream by intermittent jet against the uterine walls. For a number of years I shared this belief, but experience has taught me that a gentle projection of the fluid is an advantage, that by this means a more thorough cleansing is accomplished, and that with due caution no more danger attends the plan than that by the steady flow.

Some have adopted continuous irrigation of the uterine cavity, but this is, I feel perfectly certain, a delusion and a snare. It gives the appearance of great thoroughness, which it does not possess, for the reason that by this plan it is very difficult to bring the germicide fluid into full contact with the entire endometrium. For vaginal irrigation it is an excellent method, but I have seen it allow the temperature to remain high when applied to the uterine cavity, and have replaced it by the intermittent douche, used only as often as every three hours, with striking results. Nevertheless, in very severe cases I prefer to employ continuous irrigation, replacing its use every third hour by that of the intermittent current; rather than exhaust my patient by half-hour disturbances and injections, as has been by some advised.

After all that has been said on this subject, the essential fact is this: that plan is best which accomplishes most perfectly the cleansing of the parturient canal. With ordinary precautions, danger need not necessarily attach to any method.

3. The uterus having now been thoroughly cleansed, and the patient entirely quieted, attention should be turned to controlling the temperature, which in septicæmia of puerperal character, runs so high and maintains itself at so exalted a range as to constitute one of the immediate factors of a fatal issue. Even if this were not the case, the patient's strength is so much exhausted by prolonged high temperature, her nerve powers so much depreciated, her blood-state so rapidly injured, and her comfort so

decidedly interfered with, that these considerations alone would point to the propriety of combating hyperpyrexia. For this purpose I formerly relied upon the affusion of cold or tepid water, the patient lying upon Kibbee's cot; at present I accomplish the same result more easily and more pleasantly for the patient by the use of Chamberlain's rubber tube coil, which I here show. A mat, composed of a rubber tube rolled upon itself in a circle, covers the whole abdomen from the ensiform cartilage to the symphysis pubis; the upper end of the tube which makes this mat is anchored by a weight in a tub of ice-water, placed about three feet above the level of the patient, and the lower end falls into a tub upon the floor. By siphon action the water of the elevated tub runs through the tube which constitutes the mat, and collects in the receptacle on the floor. By this means a temperature of 104° can very readily, as a rule, for there are exceptions to the rule, be kept at 100° for weeks together.

Unfortunately, there are almost insurmountable difficulties connected with the use of this invaluable method in the minds of the patient's friends, the patient herself, the nurse, and alas, too often, the attending physician. You are told that the patient becomes chilled, that the coil prevents her resting, that the temperature absolutely goes up under its use and descends whenever it is left off. By the doctor you are apt to be informed that his fear of resulting pleurisy, bronchitis or pneumonia is very great.

I will merely say, in refutation to these charges, that in my service in the Woman's Hospital, where convalescents from laparotomy are constantly under treatment in large numbers, this means of controlling temperature is as commonly and as freely in use as poultices are in general hospitals, or gargles in dispensaries for diseases of the throat. We never meet with any of these difficulties, and very rarely with failures as to the desired result, and I believe that I am correct in saying that successive house-staffs whose duty it has been to carry out the plan have thus far had, to a man, the most implicit faith in its beneficial agency.

There are some peculiarities about it, however, which I must mention: Very often the coil will not succeed in controlling

the temperature for twenty-four hours; its prolonged use alone develops and illustrates its great benefits; and removing it from the body for an hour at a time damages its influence very much. I have never seen evil result from the chilliness which it excites, if hot bottles be kept at the soles of the feet, and in not one instance out of hundreds of cases have I seen pneumonia or pleurisy excited by it.

4. The nervous system should be kept under the influence of febrifuge medicines as to keep under the control the tendency to chill and pyrexia. For this purpose, fifteen grains of sulphate of quinine should be given in capsule or by suppository night and morning, or, in place of this, two capsules may be given night and morning of Warburg's tincture, in the form of solid extract, as advised by Dr. J. T. Metcalfe. Lastly, to the same end the salicylate of sodium may be employed.

5. The patient's diet should consist entirely of fluid food, given often and in small amounts. The staple article should be milk, but animal broths and gruels may be alternated with it with advantage.

6. At the very commencement of such a case the attending physician should, in the patient's interest, surround himself with efficient and abundant assistance. If he undertake to wash out the uterus every four or five hours without other assistance than that of the nurse; and if the patient is to rely for the constant attention and care which she will inevitably require, upon one nurse, it is needless to point out that the duty of both doctor and nurse—vital duties, be it remembered—will be but half performed. And, unfortunately, the penalty will fall upon the patient and her friends.

For a case of puerperal septicæmia to be properly treated in private practice by the plan here advocated, it is necessary for the attending physician to associate with himself some young practitioner, who has the time to devote to the case, and the intelligence to use the uterine douche safely and efficiently. Furthermore, two nurses are necessary; one to be in charge for twelve hours, and the other then to relieve and replace her for

an equal time. Without the rest and sleep thus afforded, no nurse taking charge of such exacting cases as these can possibly do her duty in such a way as to subserve the patient's interest. As a rule, the nurse will begin with the declaration that she is competent and willing to take entire charge; that she is one of those people who can do without sleep, etc.; and her heroic offers of self-sacrifice are hailed with enthusiasm by the terrified family. To believe in and to act upon this would be very foolish and very dangerous. After three nights of watching, this same nurse would snore through the hours in which her patient needed her, give the wrong medicines, mislead the doctor, allow the bladder to become distended with urine, and fail in every requirement of the occasion.

If the patient cannot bear the great expense attendant upon the extra service which I have mentioned, it is her misfortune, and for such as herself the doors of our hospitals are open. There is no case of ovariectomy in the Woman's Hospital, however poor the patient be, upon which, thanks to the generous arrangements of its managers, just such attendance as I have mentioned is not lavished.

The antiseptics which have heretofore been tried under these circumstances are thymol, boric acid, salicylic acid, carbolic acid, and mercuric bichloride. Of these, all have disappeared before the superior merits of the last two; and carbolic acid, which for so long a time has been almost supreme, appears about to be abolished in favor of the bichloride of mercury, 1 part to 1,000 or 2,000 of water. For all antiseptic purposes outside of the uterus, the bichloride is now, owing to the carefully made and important investigations of Koch, very generally employed in the strength of 1 to 1,000, and the uterus has now been washed out with this excellent germicide 1 to 2,000 often enough to make us regard its use as an intra-uterine injection as entirely warrantable. If carbolic acid be used in that way, it will not be safe to carry its strength beyond a two, or, at most, a two-and-a-half per cent. solution.

Society Reports.

ANNUAL MEETING OF THE ERIE COUNTY MEDICAL SOCIETY.

The annual meeting of the Erie County Medical Society was held January 8, 1884, in the amphitheatre of the College, corner of Main and Virginia streets. The attendance was unusually large, among those present being Drs. Nott, Briggs, F. H. Potter, W. W. Potter, Thomas Lothrop, G. E. Fell, Harrington, John Cronyn, J. L. C. Cronyn, Charles Ring, William Ring, Ingraham, Wyckoff, Warren, Mann, Edward Storck, Howe Hopkins, Hubbell, Daniels, Peterson, Samo, Gay, Dorland, Mary Runner, Wall, Lapp, Rochester, Stockton, Barker, Eli Long, B. G. Long, Gregory, Peterson, King, Mynter, Tremaine, Hauenstein, Thornton, Lynde, J. C. Greene, Dagenais, Barnes, C. L. Dayton, Dambach, Armstrong, Pryor, Macneil, Snow, Hoyer, Frank, Heath, Keene, Putnam, Granger, Mary Berkes, Andrews, Jewett, Montgomery, Phelps, Fredrich, Abbott, Johnson, J. S. Smith, Vaughn, Clark, Coakley, O'Brien, Ballou, A. G. Gumar, Crawford, Fowler, Meisberger, Bartlett, Abbott of Hamburg; Brecht, Boardman, L. P. Dayton, Davidson, Pettit, Van Peyma, William H. Jackson, B. H. Grove, Charles Cary, Walsh.

In the absence of President E. S. H. Nott, and also of the Vice-President, Dr. Ring was appointed chairman *pro tem*.

The Secretary, Dr. Barker, read the minutes of the previous meeting, which were approved. The minutes of the special meeting held since the semi-annual meeting were also approved without reading.

The reception of reports from the various committees was the next business. Dr. E. T. Dorland, as chairman of the Committee on Membership, reported that they had examined the credentials of the following candidates for membership and found them duly qualified and registered, and therefore recommended their admission as members of the Erie County Medical Society: Prof. R. A. Witthaus, William Meisburger, W. A. D. Montgomery, B. G. Long, Carleton R. Jewett, John D. Niemand,

F. W. Sweetland, W. H. Thornton, A. G. Gumar, and Mary Berkes.

On suggestion of Dr. Barker, the newly elected members were introduced to the society by Dr. Dorland.

The following applications for membership were received: Dr. William B. Hawkins, Dr. Roswell R. Park, Dr. Alpheus Prince, Dr. Herman Bauer, Dr. Albert E. Persons, Dr. Herbert Mickle, Dr. Julius H. Potter, Dr. F. R. Campbell, Dr. Andrew F. Hellwig, Dr. Reuben M. Root. They were referred until the next meeting.

The Secretary submitted a report on the by-laws of the society which on motion of Dr. Howe was received. The names of the present members to be added, and 300 copies ordered printed at an expense not exceeding \$30.

At this part of the proceedings Dr. Nott, the President, entered the room and took the Chair.

The report of the Treasurer, Dr. F. W. Abbott, was next presented, and showed a balance of \$8.30 in treasury. On motion of Dr. Howe the report was received and referred to an auditing committee consisting of Drs. Wyckoff, Gay and Howe, appointed by the President.

Dr. J. B. Samo, Librarian, presented his report, which was accepted without discussion.

The Board of Censors, through their chairman, Dr. Edward Storck, submitted a report with reference to the action of the board as to a bill presented to the last Legislature to legalize certain institutions in this State that had no legal charter and to confer on them the right of granting diplomas. They had prepared a written protest to Governor Cleveland, which was duly presented and resulted in the Governor refusing to sign the bill, which therefore failed to become a law. The report further pointed out the legal conditions under which medical schools had the power to grant diplomas, one of the conditions being that such school or college must be organized under the law of 1870, by which the deposit of a bond for \$50,000 with the State Comptroller is required. Reference was also made to the prose-

cution of a man named Leo Labolsky, who claimed to hold a certificate from Dr. Brayton, dean of the faculty of the "College of Physicians and Surgeons," but who left town, forfeiting his bail of \$100 under which he was placed by Police Justice King. In conclusion the report referred to many cases of violation of the fee bill and medical ethics and of unprofessional conduct on the part of some members of the society. No action had been taken so far, but the board suggested that either the board of this year or a special committee be authorized to investigate these cases, and prefer charges against the offenders. On one of these violations the board had taken action and asked the society to give immediate consideration to the following resolution:

WHEREAS, Members of the medical profession as members of mutual aid societies, secret orders or other benevolent associations, are asked to make examinations of applicants as thorough and complete as for any life insurance company for the amount of one dollar, therefore,

Resolved, That it shall be considered dishonorable and shall be cause for expulsion from the society for any member to make or cause to be made a medical examination, as asked by the certificates, for any such societies or individual for a less fee than \$3.

Considerable discussion ensued on the resolution, many of the members considering the wording of it as too severe, while others thought that the present mode of examination by benefit societies was a sham, and that better medical examinations and fewer assessments would be more beneficial to the societies in question. The report was finally received and the resolution laid on the table.

Dr. H. R. Hopkins, of the Committee on Legislation, reported progress. The interest in the matter, he said, was most encouraging. From every county in the State words of commendation for the project had been received. In some counties action had been taken by societies endorsing the bill. The Erie County Society was to be congratulated upon the fact that this matter was now before the entire medical profession of the State

and that there was concerted action in behalf of the object. The committee recommended for adoption a resolution urging the Senator and Assemblymen of this district to interest themselves in behalf of the bill for the establishment of a State Board of Examiners, and secure its passage.

The following is the resolution of the Committee on Legislation :

Resolved, That the Medical Society of the county of Erie urge upon the Senator from the Thirty-first District, the Hon. Robert C. Titus, and the members of Assembly from the county of Erie, Hon. Cornelius Donahue, Hon. Frank Sipp, Hon. Geo. Clinton, Hon. T. W. Jackson and Hon. David J. Wilcox, to use all laudable effort in the present session of the Legislature to secure the passage of the act proposed for the purpose of establishing the Medical Faculty or University of the State of New York.

Resolved, That copies of the resolutions be transmitted to the members of the Legislature above mentioned, and also to the secular and medical press.

The report was accepted and the resolution adopted.

The following officers were elected for the ensuing year :

President—Dr. J. C. Greene.

Vice-President—Dr. Judson B. Andrews.

Secretary—Dr. Edward Clark.

Treasurer—Dr. F. W. Abbott (re-elected).

Librarian—Dr. J. B. Samo (re-elected).

Board of Censors—Dr. E. Storck, Dr. H. R. Hopkins, Dr. A. H. Briggs, Dr. P. W. Van Peyma, Dr. F. F. Hoyer.

Essayist—Dr. P. W. Van Peyma; Dr. Herman Hartwig, alternate.

Committee on Membership—Dr. E. T. Dorand, Dr. Herman Mynter, Dr. T. M. Johnson.

Dr. Barker declined re-election as Secretary.

Dr. John Hauenstein tendered his resignation as member of the Legislative Committee. Dr. J. C. Greene was elected to fill the vacancy.

A vote of thanks was tendered the retiring President, Secretary and Treasurer for their services during the past year.

Dr. Nott, by request, withheld his annual address until the June meeting.

At one o'clock the meeting adjourned *sine die*.

Orders on the Treasury were directed to be drawn for the following: Peter Paul & Bro., \$13.90; John Ferguson, janitor, \$10; State society dues, \$25; Sydenham society, —; insurance, —.

ARTHUR M. BARKER, M. D.,
Secretary.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, February 5th, 1884.

Vice-President Dr. F. W. Bartlett in the Chair, Dr. C. M. Daniels, Secretary.

Present—Drs. Hartwig, Coakley, Burkhardt, Frederick, Weil, F. H. Potter, Wyckoff, Hubbell, and by invitation Dr. Keene.

Application for membership received from Dr. Mary Berkes who was duly elected.

Essay by Dr. C. C. Frederick, subject, "Spinal Irritation."

Discussion—Dr. Hartwig said he felt amply repaid for coming to hear the paper and that it deserved due credit. Thought there was considerable uncertainty regarding the expression, "spinal irritation." It had been more commonly used in the past than at present, and he thought "neurasthenia" should be substituted. Considered that great doubt existed in so complex a subject and that we should endeavor to look up the pathological entities and divide the group into its several divisions.

Dr. Bartlett considered the subject very interesting, although the term "spinal irritation" was very indefinite. He agreed with Dr. Hartwig in relation to its division. Reported a case where the extreme irritation was clearly traced to excessive use of tobacco. Thought that to get at the cause was the all important point. Also spoke of the giving of quinine in very large doses in cases of supposed malarial origin, which practice he condemned.

Dr. Frederick in closing said he spoke of this condition as not belonging to the true term, and that in fact "anemia" of itself was the point and not "spinal irritation" *per se*.

Voluntary Communications—Dr. Burkhardt read an original article on "A Medical View on Clothing and its Fashion." It was essentially a comparative view with the natural covering of the lower animals and argued ably and favorably for a more judicious mode of dress, especially about the *back*, which was readily shown to be the least protected and all apparently on account of the fashion of forming garments for *show*, in front, (as the vest) and the back made of thinnest material.

The writer referred to the possibility of such exposures as being the primary cause of various diseases, as albuminuria, &c., where certain organs were called upon to bear more than a proportionate amount of cold.

Dr. Hartwig reported case of a man who for two years had his feet frequently exposed to an excessive heat while standing upon a heated boiler. In August last he noticed a sudden dimness of sight of right eye. This improved a little. Right arm soon became very weak, nearly paralytic, right leg soon followed. Improvement gradually occurred, then the left side became involved to a certain extent. Mental faculties perfect. General improvement continues slowly.

Dr. H. made the report to obtain a diagnosis from the members present.

Dr. Bartlett said that conditions of this kind showed movable or transitional engorgements of spine of central origin. Also reported a case of great "Alopecia" where there was no apparent cause, not one single hair being discoverable upon any portion of the body.

Dr. Coakley asked the treatment in the case reported by Dr. Hartwig.

Dr. Hartwig replied that he had tried pot. iodide, ergotine, rest, galvanism, etc., but could not say that either was of much value.

Dr. Wyckoff read a very interesting report of a case of rupture of the heart (given in full in the JOURNAL for February).

Dr. Bartlett, in commenting upon the case, considered it very rare and important.

Prevailing Diseases—Scarlet fever with tendency to croup, measles.

Adjourned.

CLAYTON M. DANIELS,
Secretary.

THIRTY-EIGHTH COMMENCEMENT OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO.

The annual commencement exercises of the Medical University of Buffalo were held in this city Feb. 26, 1884. The meetings of the Alumni Association were also held during the day in the college buildings. The following members of the Alumni Association were present during the day: Dr. E. N. Brush, of Utica, President; Dr. A. M. Barker, of Buffalo, Secretary.

Of the class of —

- '47—William Ring, Buffalo.
- '48—C. C. Wyckoff, Buffalo; H. Hoyt, Aurora, N. Y.; A. G. Ellenwood, Attica, N. Y.
- '51—T. D. Strong, Westfield.
- '52—George Abbott, Hamburg.
- '53—C. L. Dayton, Buffalo.
- '59—W. W. Potter, Buffalo.
- '61—F. D. Ritter, Gaines, Pa.
- '65—H. Lapp, Clarence.
- '66—Conrad Diehl, Buffalo; W. C. Phelps, Buffalo.
- '67—E. C. W. O'Brien, Buffalo.
- '68—John Dambach, Buffalo.
- '69—John H. Taylor, Holley, N. Y.; G. W. Pattison, Buffalo.
- '70—C. B. Kibler, Corry, Pa.
- '71—D. W. Harrington, John J. Walsh, A. H. Briggs, Buffalo; O. C. Strong, Colden, N. Y.
- '72—P. W. Van Peyma, Charles B. Knowlton, F. E. L. Brecht, Buffalo; F. H. Moyer, Moscow, N. Y.

'73—F. E. Dewey, Peterboro; Ambrose Kassan, Bath; Joseph Fowler, D. L. Bailey, Buffalo.

'74—E. N. Brush, Utica; Bernard Bartow, Buffalo.

'75—W. B. Cottier, Buffalo.

'76—C. H. Wetzels, Mrs. Mary B. Moody, A. H. Hubbell, W. J. Packwood, Buffalo.

'77—C. C. Harvey, Dundee, N. Y.; A. M. Barker, Buffalo; W. F. Sheehan, Rochester; I. M. Dike, Jordan, N. Y.; Lee H. Smith, Frank C. Sherwood.

'78—Charles A. Ring, Buffalo Plains.

'79—Frederick Peterson, W. H. Pitt, C. A. Wall, Buffalo.

'80—F. O. Vaughan, Edward Clark, W. C. Barrett, S. H. Warren, Mary Burkea, B. H. Grove, E. C. Waldruff, Buffalo.

'81—John J. Birmingham, Mary E. Runner, Irving M. Snow, Buffalo; W. A. Hobday, Alton, Pa.

'82—J. Frank, Eli H. Long, F. H. Potter, Charles Weil, Willis G. Gregory, J. W. Putnam, Buffalo; D. W. Wollaber, Cambria, N. Y.; W. B. McDougall, Spencerport, N. Y.

'83—E. G. Long, Buffalo; B. D. Beidelman, Tunkhannock, Pa.; Mrs. Isabella Stanley, Dnnkirk, N. Y.; F. B. Burroughs, Columbus, Pa.

Honorary—J. B. Coakley.

Dr. W. C. Barrett, Chairman of the Executive Committee, and Dr. C. C. Wyckoff, Treasurer, made their annual report. A committee consisting of Drs. Dewey, Ring, Potter, Walsh, and Diehl, was appointed to nominate officers for the ensuing year. The following is the report of the committee whose nominations were confirmed: After due deliberation we present the following list of officers for the coming year:

President—E. C. W. O'Brien, Buffalo.

First Vice-President—C. Diehl, Buffalo.

Second Vice-President—D. W. Harrington, Buffalo.

Third Vice-President—Mary B. Moody, Buffalo.

Fourth Vice-President—W. F. Sheehan, Rochester.

Fifth Vice-President—Theodore H. Boysen, Buffalo.

Secretary—A. M. Barker, Buffalo.

Trustees—F. W. Abbott, C. C. Wyckoff, William C. Phelps, P. W. Van Peyma, Buffalo; Henry Lapp, Clarence.

Executive Committee—Mhe President of the Association, ex-officio; the Secretary of the Faculty, ex-officio; C. A. Ring, J. W. Putnam, F. H. Potter, Buffalo.

Honorary Members—Roswell Park, Herman Mynter, J. F. King, E. T. Dorland, Buffalo.

After the address of the President, Dr. E. N. Brush, on the general subject of the preparatory education of medical students, an interesting paper on "Nerve Force" which the JOURNAL expects to be able to present to its readers in its next number, was read by Prof. W. H. Pitt, of Buffalo. Prof. Roswell Park next read a practical paper on the radical cure of Hernia. He advocated the method of Czerny of Heidelberg, in which the writer has had considerable experience and which method seems not to have received in this country the favorable notice to which apparently it is entitled. The concluding essay of the session was by Dr. William F. Sheehan, of Rochester, on "Common Defects of House Drainage." This was illustrated by means of the Steriopticon. The subject received very able and interesting treatment and was discussed by Drs. Andrews and Nott. A vote of thanks was given to the several essayists and the meeting adjourned.

The commencement exercises at Concert Hall were held in the evening, the hall being completely filled. Upon the platform were seated the members of the faculty, the curators and members of the council. After music by the orchestra, the commencement exercises were inaugurated by prayer by the Rev. Dr. Van Bokkelen, chaplain of the college.

Prof. Charles Cary presented the class in the following words: "Mr. Chancellor, I take pleasure in presenting this graduating class. They have passed good examinations, and I present them to you that they may receive their degree."

Dr. Rochester, as vice-chancellor, responded and requested the class to arise, lift the right hand, in order that they might take the Hippocratic oath. He swore them to do their duty to their patients, never to reveal the secrets of those who placed themselves in their care, and never to administer medicine for any improper or unlawful purpose.

The degrees were conferred in the usual manner by the vice-chancellor, Prof. Thomas F. Rochester, upon the following:

Ahlstrom, Christian P., Jamestown, N. Y.
Babcock, Marcus F., Hammondsport, N. Y.
Bartholomew, Lorenzo S., Dundee, N. Y.
Bingham, Henry H., Lancaster, N. Y.
Burchard, William W., Dalton, N. Y.
Borland, Wilbur P., Richfield Springs, N. Y.
Brewer, George E., "A. B., Buffalo, N. Y.
Brooks, Mark N., Colden, N. Y.
Campbell, M. Usher, Lebanon, N. Y.
Callahan, William C., Buffalo, N. Y.
Caswell, James C., Cassadaga, N. Y.
Connolly, John P., Binghamton, N. Y.
Cross, Irwin M., Olean, N. Y.
Cott, George F., Buffalo, N. Y.
Crowe, Thomas M., Corry, Pa.
Culver, Miss Anna B., Des Moines, Iowa.
Dauser, Earl G., Clarence, N. Y.
Doherty, Edward P., Menram Cook, N. B.
Eaton, Edelburt M., Ulysses, Pa.
French, Wallace J., Wellersfield, N. Y.
Gardener, William F., Conewango, N. Y.
Goldberg, Sedmond, Buffalo.
Hammill, Vincent G., Phenix, N. Y.
Harding, Arthur B., Hume, N. Y.
Herrmann, Samuel S., Bradford, Pa.
Johnson, Matthias, Redwing, Minn.
Kelly, John George, Bergen, N. Y.
Larzalere, John V., Waterloo, N. Y.
Lyman, Almon H., Hume, N. Y.
Loomis, Boardman J., Buffalo, N. Y.
Matzinger, Herman G. A., Buffalo, N. Y.
McCollum, George D., Ransomville, N. Y.
McDonald, William, Buffalo, N. Y.
McMichael, Jacob D., Buffalo, N. Y.
Millar, Wm. John L., Russell, N. Y.
Mullen, Isaac T., Alexander, N. Y.
Neumann, Theodore, Buffalo, N. Y.
Oliver, William A., Penn Yan, N. Y.
Park, William, Buffalo, N. Y.
Pawling, Thomas H., Bath, N. Y.
Payne, Charles S., Berkshire, N. Y.
Peterson, Elliott M., Jamestown, N. Y.

Pitkin, John T., Buffalo, N. Y.
Porter, James, Urbana, Iowa.
Putnam, William A., Cassadagb, N. Y.
Richardson, Edwin C., Alexander, N. Y.
Ring, William G., Buffalo, N. Y.
Robertson, Charles B., Towlesville, N. Y.
Rochester, Delancey, Buffalo, N. Y.
Rowley, Ransom F., Cuba, N. Y.
Schmitz, M., Wisconsin.
Scofield, Era M., Bemus Point, N. Y.
Seymour, Burton W., Stockton, N. Y.
Shaffner, Edward M., East Ashford, N. Y.
Smith, John W., Buffalo, N. Y.
Snover, Halsey D., Machias, N. Y.
Storr, Elmer G., Edwardsburg, Mich.
Stone, Harry H., Franklinville, Ont.
Tanner, William T., Buffalo, N. Y.
Vanderburg, Frank P., Mt. Vernon, N. Y.
Wisner, Andrew P., Mt. Morris, N. Y.
Woolson, William C., Niagara Falls, N. Y.

Dr. Rochester then announced that two of the graduates had been selected from the excellence of their theses for honorable mention. For the thesis on "Phosphoric Acid in Urine," John T. Pitkin of Buffalo took the first place, and for a thesis on "Morbus Coxarine," Will F. Gardner of Conewango was entitled to the second place. Dr. Rochester further said that the faculty had decided to introduce a new feature in the line of honors for merit, and it was one that was wholly unexpected by the class. The men who stood at the head had been selected as entitled to honorable mention. In this class he read the following :

First place—William McDonald.

Second place—De Lancey Rochester and Frank P. Vandenburg.

Third place—George E. Brewer and M. U. Campbell.

Fourth place—Charles S. Payne and John T. Pitkin.

Fifth place—Edward P. Doherty, Elliott M. Peterson and William A. Putnam.

The exercises consisted of an address to the graduating class of Prof. Roswell Park, which was well received. The address to the alumni was by the Hon. James O. Putnam, and was one

which cannot be too highly praised. We are glad to find that the paper is published in full in the columns of the *Commercial Advertiser*, and we earnestly urge our readers to obtain a copy that they may read this thoughtful and most eloquent address. The exercises concluded with the benediction by the Rev. Van Bokkelen.

The banquet was given at the Genesee, and was without exception the best in all respects which it has been our privilege to attend. The replies to the several toasts were uniformly excellent and we have no hesitation in saying that all departed in the most pleasant frame of mind.

Editorial.

THE MEDICAL PROFESSION.

"I know him to be of worth,
And of worthy estimation."

—*Shakespeare.*

The estimate which a man makes of himself is often the estimate at which he is held by his acquaintances, and especially is this true, if the estimate so far from being an index of vanity and conceit, represents simply a manly independence, and that self-respect which is founded on conscious integrity and a fair and just estimate of worth. As with an individual, so with a profession.

In the medical world the temptation "to crook the pregnant hinges of the knee, where thrift may follow fawning," seems many times irresistible. That in individual cases pecuniary profit may occasionally accompany this practice will not be denied. But in these instances pecuniary gain is moral loss; and what is even worse, this unsanctioned and miscalled gain of the individual is the loss and degradation of the profession, of which such individuals are dishonorable members.

No impartial judge will deny that over-crowding a profession necessarily increases this temptation, in that it morbidly intensifies the strife for existence; and unhappy is it that the "survival of the fittest" can many times be here only admitted in a low sense, as meaning the survival of those most fit for strategems and spoils.

That the medical colleges are, in great measure, responsible for this demoralized state, has many times been clearly pointed out. Their greed and want of principle are peculiarly their own shame; and yet, in some measure, must the whole profession, of which the various college faculties form a prominent part, suffer discredit and the other inevitable consequences of prestige and reputation sacrificed to overweening selfishness. The profession of this city has had, during the past year, proof of the low estimate at which its character and services are held. At least two of the members of the staffs of our most prominent hospitals, after a working lifetime of most faithful services, have received as a reward summary and uncomplimentary dismissal, and this, as we believe, in the one case as a matter of rivalry, and in the other of repaying the incivility, in accordance with the well-known principle that two wrongs make a right. These two physicians, capable and faithful in the highest degree, honored and esteemed by the profession, after years upon years of toil and thought devoted to institutions towards which, from long and intimate association, they had learned to feel a paternal and loving interest, are become the victims of that disgraceful estimate at which the profession and its services are held by a shrewd and captious public.

In the face of this, what can be more humiliating than the thought, that the medical profession, having its own making entrusted to its care, should thus, voluntarily, from apathy or greed, have suffered itself to sink so low.

Utopian as it may appear, we hold it the duty of a physician to refuse preferment under circumstances such as these, where the acceptance involves such gross injustice to a fellow-worker.

To this position of manly independence and self-respect, must the profession rise before it can command or be entitled to the respect of a critical and prejudiced public. As a means to this end we regard the State Faculty Bill, and we make the prediction that eventually this honorable standard of medical ethics, compared with which the question of the new code is of the most trivial importance, will be established. Then, and then only, will it be truly said of the medical man: "I know him to be of worth and of worthy estimation."

AN IMPORTANT CHANGE.

The change in the management of the Erie County Insane Asylum whereby Dr. Charles A. Ring has assumed the Superintendency of that institution is a movement of so much importance that we cannot forbear to notice it. With the increase in population of our city, the number of insane collected in the County Asylum has been largely augmented, and as a consequence the necessity of a Superintendent possessed of a thorough medical education and a familiarity with insanity in its scientific management has received deserved recognition. At last, this principle has been put in operation, and the selection of the Superintendent has been made from professional fitness rather than from political influence. We cordially endorse the appointment. Dr. Ring has occupied for several years the position of resident physician at the asylum and has demonstrated by long and faithful labor his ability and capacity for the position to which he has been appointed. The profession will thoroughly endorse not only the principle upon which the change in management is based, but also the personal and professional fitness of the new Superintendent. There is no reason why our County Asylum in which are aggregated large numbers of the insane should not be placed under stricter management. The State recognizes this principle in the superintendency of its institutions, and the benefits received therefrom are among the blessings which flow

from these sources to the public at large. The county has needed for a long time just such a change. It comes late, but not so late as to prevent Dr. Ring from instituting necessary reforms and thus accomplishing much good to the unfortunate inmates over whom he has been placed. We shall look therefore for great improvement in the asylum that will make it compare in its results with the State Asylums, which have long been a pride of our Commonwealth.

BUFFALO OBSTETRICAL SOCIETY.

We have in the city several Medical Societies devoted to general medicine. This society, devoted to Obstetrics, Gynæcology and Pediatrics, is the first organized for the study of a special class of medical topics. Its objects are similar to societies under the same title in other cities, and we bespeak for it like success. The following are its officers:

W. W. POTTER, M. D., President.

R. L. BANTA, M. D., Vice-President.

GEO. E. FELL, M. D., Sec. and Treas.

The meetings are held on the last Tuesday of each month. The first meeting was held at the residence of the President, Dr. Potter, 306 Franklin street, on Monday evening, Feb. 25th, in order to allow the members to attend the Medical Commencement which was to take place on its regular evening. Dr. Potter read a very interesting paper on Post Partum Hemorrhage, which called forth an interesting discussion. A bountiful collation fittingly supplemented the exercises of the evening. Dr. C. C. Fredericks is designated as the next essayist. The membership is limited to twenty members. We shall avail ourselves of the proceedings of this society for valuable material for the JOURNAL. These special societies are successful in other cities, and we are confident the well-known ability of the projectors of this movement will secure a like success here.

THE SPRING COURSE OF THE MEDICAL COLLEGES.

For reasons quite obvious to the profession, to which we need not refer in this connection, the medical colleges have arranged for a spring course adapted to both advanced students and beginners in medicine. The importance of Buffalo as an advantageous point to secure both clinical and didactic facilities are thus recognized, and we join in congratulating the profession for this recognition. The announcements have been issued for the Niagara Medical College, as well as for the Buffalo Medical College, and we select the following items of interest to the profession in regard to the new movement.

Niagara Medical College opens its spring course April 3d, and continues ten weeks.

This course is intended to give students an opportunity to pursue their studies in certain directions in a more specific and thorough manner, and to enable them to more carefully and minutely engage in clinical study and observation, and thus to augment that knowledge of disease which is so essential to professional success. It will be arranged so as to accommodate two classes of students; yet there will be no conflict in the hours of teaching, so that each student who may so desire can attend all the lectures and recitations. A *clinical or practical* course of lectures will be given for advanced students and recent graduates, and a *recitation* course will be especially arranged for and adapted to those just entering upon the study of medicine, or who may have attended one term of medical lectures.

CLINICAL COURSE.

The value and importance of clinical instruction and personal familiarity with medical and surgical diseases require no emphasis in an announcement of this kind. That the ordinary college curriculum and intimate study of disease and methods of treatment, is most forcibly attested in the demand for and success of post-graduate schools in our large medical centres. The Clinical Course in this school is, therefore, inaugurated to supplement the usual di-

dactic teaching which is given, often, to large numbers of students, and which is of a character necessarily limited to the essentials and elementary principles of medicine. It will be as full and complete as the limited time will permit, and superior facilities will be offered by the Faculty for clinical study and observation. The course has been arranged with special reference to the needs of those who are sufficiently advanced to appreciate and understand the application of the principles enunciated in the lecture room, and as exemplified at the bedside and by cases furnished in the hospital wards and dispensary practice, due prominence, however, being given to the most frequent forms of disease and injury with which the young practitioner will meet in the early period of his professional career.

RECITATION COURSE.

In this course the student will pursue the elementary branches of medicine, including Anatomy, Physiology, Chemistry and Materia Medica. The instruction will be largely by recitations from textbooks, and by occasional lectures, aided by practical work and demonstrations, and will be suited to young men beginning their medical studies and those who are partially advanced. Able medical gentlemen have been appointed by the Faculty to assist in conducting this course, and every effort will be made to render it of unexceptionable value to the student.

CLINICAL FACILITIES.

The Faculty has at its command the ample facilities of the large and well-equipped Hospital of the Sisters of Charity, the Pine street Emergency Hospital, St. Francis' Hospital, the Washington street Dispensary, the good Samaritan Eye and Ear Infirmary, etc., from which abundant clinical material is furnished for its classes.

DISSECTION.

Abundance of anatomical material is available for students who may wish to dissect, and comfortable apartments will be provided for the purpose.

FACULTY.

Clinical.—John Cronyn, M. D., Clinical Medicine. William S. Tremaine, M. D., Clinical and Orthopedic Surgery. Thomas Lothrop, M. D., Clinical

Midwifery. Henry D. Ingraham, M. D., Clinical Gynecology and Pediatrics. William H. Heath, M. D., Clinical Genito-Urinary Diseases. Alvin A. Hubbell, M. D., Clinical Ophthalmology and Otolaryngology. Dougald Macniel, M. D., Clinical Dermatology. Floyd S. Crego, M. D., Clinical Nervous Diseases.

Didactic and Recitation.—Augustus R. Davidson, M. D., Medical Chemistry. George E. Fell, M. D., Physiology and Microscopy. Charles G. Stockton, M. D., Materia Medica and Medical Botany. Clayton M. Daniels, M. D., Minor Surgery. Frank H. Potter, M. D., Descriptive Anatomy. Herbert Mickle, M. D., Regional and Surgical Anatomy. Frederick R. Campbell, M. D., Hygiene. Carlton C. Frederick, M. D., Physical Diagnosis. Edward Clark, M. D., Emergencies and Pathological Anatomy.

FEES.

The fees for the course are \$10.00.

Students who take tickets for the present or the next regular Winter Course will be admitted free.

For further particulars regarding either the Spring or Winter Course of lectures, address the Secretary.

A. A. HUBBELL, M. D.

181 FRANKLIN STREET, BUFFALO, N. Y.

Buffalo Medical College opens its course Monday, March 3d, and continues eight weeks. The following are the faculty and the special departments :

FACULTY.

E. V. Stoddard, M. D., Professor of Materia Medica and Therapeutics; M. D. Mann, M. D., Professor of Obstetrics and Gynecology; F. W. Abbott, M. D., Lecturer on Otolaryngology; A. M. Barker, M. D., Lecturer on Diseases of Children; J. W. Keene, M. D., Lecturer on Obstetrics; Frederick Peterson, M. D., Lecturer on Anatomy; D. F. McPherson, M. D., Lecturer on Minor Surgery; Eli H. Long, M. D., Lecturer on Special Therapeutics; Charles Cary, M. D., Professor of Anatomy; R. A. Witthaus, M. D., Professor of Chemistry; Roswell Park, M. D., Professor of the Principles and Practice of Surgery; Lucien Howe, M. D., Lecturer on Ophthalmology; Bernard Bartow, M. D., Lecturer on Orthopedic Surgery; W. C. Barrett, M. D., Lecturer on Oral Diseases; John H. Pryor, M. D., Lecturer on Physical Diagnosis; Julius Pohlman, M. D., Lecturer on Physiology; Frank A. Vandenburg, M. D., Lecturer on Chemistry.

The recitation course will be similar in its purposes and advantages to the one above noticed. Clinics will be held at the General

Hospital on Wednesday and Saturday of each week, as heretofore. Dr. Howe will continue his weekly clinics in Ophthalmology.

The "White Library," in the College building, will be open to the students during the day and evening, where books of reference can be consulted, and all the leading medical journals and publications found on file. The Librarian will be in attendance.

An attendance on the Spring Course will be counted as time spent in the study of medicine under the direction of a practitioner, but it cannot be considered as a *course of lectures* in the requirements for graduation.

FEEs.

The matriculation fee for this course will be good for the following Winter Term.

General ticket, \$15.00.

Special tickets for any single course can be obtained on application to the Secretary. Fee, \$5.00.

All communications should be addressed to

J. H. PRYOR, Sec'y and Treas. Spring Faculty,
327 Franklin Street.

EDITORIAL NOTES.

SOCIAL MEDICAL ORGANIZATIONS.

That social intercourse and professional study may be advantageously combined, has been clearly shown in this city by the existence and continued prosperity, during a period of eight years, of the social medical organization, known as the Medical Club. The essential features of this society we proceed to state: Its membership is limited to a number that can be conveniently entertained at an ordinary private residence. A unanimous vote is required for the admission of new members, this being considered essential an account of the social element. The meetings are held bi-weekly and consist of the reading of a paper and discussion of the same, followed by clinical reports of interesting cases. The meetings are held in routine at the several residences of physicians conveniently located. After the adjournment of the meeting proper, social intercourse including a modest collation, completes the evening.

The history of the Medical Club shows not alone that scientific work and social relaxation can be conjoined, but proves the advantage of the combination. The meetings of the Medical Club are attended by an average of two-thirds of its membership. It has done more to promote medical thought and progress than all the organizations in the city and county combined. In addition to all this, and of perhaps equal importance, has been the working of the social element in softening the asperities, and counteracting the many causes of jealousy, among medical men. Through its agency the members have learned to respect the many good qualities of heart and mind of their associates, and in turn have been prompted to renewed endeavors and the establishment of a higher standard for themselves.

It has been sagely remarked that imitation is the highest praise, and certainly duplication indicates most earnest endorsement. For reasons already stated, we hail with sincere pleasure the establishment within the past three years of the Medical Union, an organization of similar constitution and purposes with the Medical Club. The well written article on Dysentery, in the preceding number of the JOURNAL, was prepared and read by a member of this more recently established Social Medical Organization. Its membership is already practically completed, showing, as we believe, that the field is still open for similar coteries. Of the Medical Union we anticipate beneficent influences no less marked than those shown by the past history and expected from the future of the Medical Club. To its members the editors of the JOURNAL wish much scientific improvement as well as social pleasure, and it is their hope that the pages of the JOURNAL may, from time to time, be enriched with the most interesting and best digested of their clinical reports and original papers.

NOTICE OF APPOINTMENT.—We take the most sincere pleasure in noticing the appointment as Lecturer on Obstetrics in the Spring Course of the Medical Department of the University of Buffalo, of Dr. Joseph W. Keene, of this city. Long and intimate acquaintance has taught us to look upon him as the peer of any of his medical brethren of the city, in all that goes to make a man and a physician.

In his appointment the college has shown its appreciation of his sterling qualities and is to be congratulated in at least equal measure with the newly appointed lecturer.

WANT OF SPACE.—An extended review of the Report of the Buffalo State Asylum for the Insane is crowded out for want of space. This will be published in the April number.

Reviews.

The International Encyclopædia of Surgery: A Systematic Treatise of the Theory and Practice of Surgery by Authors of Various Nations. Edited by JOHN ASHHURST, Jr., M. D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with Chromo-Lithographs and Wood Cuts. In six volumes. Volume iv. William Wood & Co.: New York. 1884.

The fourth volume of this work concludes the articles on Injuries and Diseases of the various tissues, and with it commences the discussion of the Surgery of Regions. Of these the article on diseases of bones, to be written by Prof. Allier, of Lyons, is postponed to a later portion for the reason that it has been found unable to prepare it for this.

From the preface we also extract the following: "The elaborate article herewith presented on Injuries of the Back possesses the melancholy interest of being a posthumous contribution from the pen of the lamented Lidell, who died almost as the last proof-sheets of his work were being corrected." It had been his intention to add a brief supplement, referring to several cases of spinal injury recorded in the third surgical volume of the Medical and Surgical History of the War of the Rebellion, and the preface further adds, that the author "would doubtless also have taken some notice of the recently published views of Mr. H. W. Page, as to the so-called 'Rai way Injuries of the Spine,' views which differ in certain particulars from those which Dr. Lidell has advocated."

The list of articles contained in the fourth volume is as follows:

Injuries of Bones, by John H. Packard, M. D., Surgeon of the Episcopal Hospital and St. Joseph Hospital, Philadelphia; Diseases of the Joints, by Richard Barwell, F. R. C. S., Surgeon to Charing Cross Hospital, London; Excisions and Resections, by John Ashhurst, Jr., M. D., Professor of Clinical Surgery in the University of Pennsylvania; Excision of the Knee Joint, by George E. Fennick, M. D., C. M., Professor of Surgery in McGill University, Surgeon to the Montreal General Hospital; Tumors, by Henry Treatham Butler, F. R. C. S., Assistant Surgeon to St. Bartholomew's Hospital, London; Injuries of Back and Spinal Column, Cord, etc., by John Lidell, A. M., M. D., late Surgeon to Bellevue Hospital, New York, etc.; Malformations and Diseases of the Spine, by Frederick Treves, F. R. C. S., Assistant Surgeon to London Hospital.

The volume contains six chromo-lithographs and two hundred and twenty-six wood-cuts.

Our readers need not be told that the names of the contributors above rehearsed are a guarantee of the character of the work. In its scope and purpose it compares with the well-known Holmes System of Surgery, and it forms as complete and authoritative a work of reference as any with which we are familiar. The style of the volume, comprising nearly a thousand pages of elegantly printed matter, as well as the superior binding is an example of the best work of the publishers, William Wood & Co., who have for many years done so much for medical literature. As we have implied, the work is one for reference, comprising, as it will when completed, six volumes of nearly equal size. It would appear that for some time, at least until new discoveries and researches again change the science of surgery in some of its branches, that nothing more could be desired by the surgeon than he will have upon the completion of the present *Encyclopædia of Surgery*.

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Original Communications.

POST PARTUM HEMORRHAGE—REMARKS UPON ITS PREVENTION
AND TREATMENT.*

BY W. W. POTTER, M. D.

If an apology were needed for presenting, to an assemblage of skilled medical men, a subject so time-worn and threadbare, I should find it in the fact that post partum hemorrhage possesses special and always fresh interest to the obstetric practitioner; and, in its frequent discussion he may meet with welcome suggestions which may aid him in future conflicts with this terrible calamity to the parturient woman. This is an accident of labor which differs from almost all other complications in this, that the medical attendant, whether skilled or unlearned, must make the combat with it alone and unaided by his professional brethren. While most other abnormalities of parturition permit more or less delay in treatment, thus affording time to obtain assistance, this one springs up so suddenly, oftentimes so unexpectedly, and, moreover, runs its course so rapidly, as to place the patient beyond help, if instant and efficient aid be

* Read before Buffalo Obstetrical Society.

not afforded her. And yet in these very cases, sudden and unexpected though they may be in their invasions, so appalling in their bloody physiognomy, and, withal, so quickly and certainly fatal—it is, I say, these very cases which respond with an amazing certainty to prompt and intelligent methods of treatment. In the discussion of this subject, there seems to be a great lack of definiteness and precision in regard to the conditions occasioning post partum hemorrhage, and, as a consequence, much looseness of opinion as to the real, as well as the relative, value of remedies advocated for its relief. This want of sufficient precision and definiteness has led writers to advocate, or condemn, particular methods or remedies without regard to the antecedent causes of the hemorrhage, thus leading them to urge or oppose, at times, a remedy of great value in its proper place, but useless or dangerous when otherwise employed. In order to give clearness to my own views of treatment it will be necessary, first, for me to notice briefly the causes of this direful malady.

Post partum hemorrhage may be defined as a hemorrhage from any of the parturient structures, from the moment the child is expelled until the organs have returned as nearly as may be to the condition they possessed prior to fecundation; and may be sub-divided into (a) primary, (b) secondary.

CAUSES.

I. *Uterine atony, or inertia.* Undoubtedly the most frequent cause of post partum hemorrhage, is a failure of the uterine muscle to assume that condition of firm contraction which is necessary to obliterate the blood-vessels ramifying through the walls of the organ, and thus to render them incapable of carrying blood to the torn utero-placental orifices.

II. Partial adhesion of the placenta to the uterine wall, which prevents, or renders impossible, the necessary degree of shrinkage of the organ to the complete obliteration of the uterine blood-vessels. This is, oftentimes, a condition the reverse of inertia—

the uterus being in a condition of firm contraction, but the adherent placental mass being of adequate size to prevent sufficient shrinkage of the muscular fibers of the uterus to ensure closure of the orifices of the blood-vessels. This might be included under the general head of "mechanical interference preventing the action of a uterus willing to contract;" and to this class of causes might properly be added those cases where the hemorrhage is caused by the presence of fibroids in the uterine walls, or of a polypus in its cavity.

III. *Solutions of Continuity.* Under this head I would group the various lacerations possible during labor; laceration of the uterine body, of the cervix, and of the os, as well as laceration of the vagina and perineum; and here, also, might be included hemorrhage caused by a ruptured pudendal hematocoele, or vulvar thrombus; a solution of continuity may also exist in the form of cancer of the uterus, but as cancer may act in several ways as a cause of post partum hemorrhage, I shall further on place cancerous disease in a class, *per se*.

IV. A fourth class of causes embraces those where the essential shrinkage of the uterus is prevented by external abnormal peritoneal adhesions, or by a distended bladder.

V. Causes which occasion a sudden congestion of the uterine body, *e. g.*, improper exertion after labor, or powerful emotions, which latter may properly be classed as psychical causes.

VI. In a sixth class are placed those cases due to diseases of the uterus producing tissue metamorphosis, as cancer, which, as I have before remarked, may act in various ways as an etiological factor in post partum hemorrhage; 1st, by its size it may prevent the essential shrinkage; or, 2d, it may so alter the character of the uterine tissue as to render it incapable of contraction; or, 3d, it may greatly increase the vascular supplies to the womb.

VII. Finally, a predisposing cause of post partum hemorrhage is, not seldom, a hemorrhagic diathesis.

The etiology of post partum hemorrhage might be further subdivided, perhaps, but as it is not the design of this paper to

enter into a full discussion of the causes of the malady—merely to refer to them sufficiently to elucidate my own convictions of treatment—I pass at once to the consideration of the essential branch of the subject, viz., its therapeutical management.

As we have already seen, the chiefest factor in the production of flooding after labor is uterine inertia. How shall it be prevented, or, having occurred, how shall it be overcome? are questions of the greatest import.

How, then, shall uterine inertia be prevented? Assuredly the preventive treatment must be based upon a most definite conception of all the predisposing and exciting causes that can possibly occasion the accident. Dr. Thomas says that "uterine inertia is, in a large number of cases, due to mismanagement on the part of the practitioner," meaning that the attendant has not paid sufficient attention to the securing of firm uterine contraction. For myself, I should say that a principal cause of uterine laxity, and, as a consequence, of flooding after labor, is faulty management of the delivery of the placenta and membranes.

Obstetricians may be classed somewhat loosely into two parties, namely: those who regard the expulsion of the secundines of such prime importance that they do not intermit their care of the womb until this process has been entirely completed; and those who leave all or nearly all to nature, within certain limits of time, unless some emergency occurs calling for more prompt assistance.

But it is to the particular method of effecting delivery of the placental body and its attached membranes that I would invite your special attention at this time, for it is here that, within a comparatively short time, a great change has been made in practice, and which is, as I think, a great advance in the obstetric art. When I was taught midwifery, I was told to wait, after the birth of the child, some fifteen or twenty minutes, and then, if the placenta was not found lying in the vagina, uterine contraction was to be re-excited, by friction, cold or warmth, slight traction at the cord, and compression

of the uterus. Failing in these measures at the end of an hour the hand was to be passed into the uterus and the placenta extracted. The theory of all teaching at that time was, that in the majority of cases the uterus spontaneously expels the placenta into the vagina, and for this we were told to wait ten to thirty minutes or longer. Now-a-days a teacher who would instruct his pupils to wait for the spontaneous expulsion of the placenta would be something of a curiosity, I imagine. Since 1853, when Professor Credé of Leipsic first made known his method of placental expression, a radical change has been wrought in the management of this stage of labor, and the doctrine of extrusion of the placenta by some form of supra-pubic pressure is now almost universally taught. Credé's method is simple in principle and easy of execution. Let me quote his own words in description of it, since we are all students as well as practitioners. Says Credé: "Its object being to reinforce the uterine contractions the accoucheur should act during a pain, and not in the interval; success is more rapid, the sooner after the expulsion of the fœtus this effort is made; nevertheless, it may succeed a quarter of an hour or even half an hour after, but delay presents an unfavorable condition.

"When the retraction of the uterus has attained its maximum in the first contraction which normally occurs after the escape of the infant, embrace the fundus and the superior part of the anterior wall of the uterus with the entire right hand placed transversely. Then press downwards and backwards, assisting if necessary with the left hand. Under this pressure the placenta and membranes are detached, then engorge the uterine orifice, sometimes even escape suddenly from the vagina, just as a cherry stone escapes when the cherry is pressed between the finger and the thumb."

In this connection I may be pardoned for giving my own method of conducting placental delivery, since a considerable experience has convinced me that the plan of maintaining the contraction of the uterus until after the birth of the placenta, by

well-directed supra-pubic pressure is not a mere theory which has no value at the bedside, but one that, when properly carried out, seems to reduce the liability to post partum hemorrhage to a simple minimum. Immediately prior to the termination of the second stage of labor, I grasp firmly with the disengaged hand (usually the left) the fundus uteri and maintain moderate pressure, following the descent of the child until it clears the lower outlet. When this event happens, I direct the nurse to gently grasp the descending womb and maintain moderately firm pressure until separation of the child. This being quickly accomplished, speaking generally, I turn my attention once more to the womb, grasping the fundus with the left hand, straighten out the cord, without traction with the right, two fingers in the vagina being usually sufficient, when, in the great majority of cases, the placenta is found either partially or completely expelled from the uterus, and all that remains to do is to remove it, being careful, of course, to deliver the secundines entire, at the same time. I still maintain supra-pubic pressure upon the now contracted and hardened uterine body until the binder is applied, which I am careful to adjust low down around the hips, and with as little disturbance to the patient as possible. All debris having been removed and the bed-clothing carefully adjusted according to the season or temperature of the room, I direct the patient to remain perfectly quiet in the recumbent posture for an hour or more, at the end of which time, my offices being ended, I take my leave, provided always, that no unusual circumstance has occurred to prevent.

At the risk of being wearisome I have been diffuse in my description, for I regard as necessary to success in this plan, as, indeed, is the case in almost everything in life, that there shall be the minutest attention to details. Permit me, therefore, to further elaborate one or two important points essentially necessary to the successful employment of this method.

I. It will be observed that, from a point of time dating just prior to the expulsion of the infant to the application of the

abdominal bandage, the uterus is kept within the relentless grasp of either the accoucheur or nurse. The object of this is twofold: If pressure be not directed at once to the uterus, the womb closes over the after-birth and prevents its speedy expulsion, whereby a proportionate amount of risk of post partum hemorrhage is involved. Should flooding arise in spite of all our precautions, we have, by the maintenance of firm pressure, the uterus more immediately under our control.

II. Even the slightest traction of the cord is not permitted. This pernicious practice cannot, in my opinion, be too severely reprehended. A moment's glance at the mechanism of the expulsion of the placenta when left to itself will serve to convince any one, it seems to me, of the error of dragging, or pulling, or even of touching the cord with a view to hasten the separation or delivery of the after-birth. The placenta may be likened unto a rounded disk or flattened cake, and to find out the natural mechanism of the expulsion of this cake, it is only necessary to watch the process as nature conducts it, that is, in cases wherein the practitioner does not try to modify it in any way.

In this way it will easily be discovered that the part of the placenta presenting at the os uteri, and subsequently at the ostium vagina, is not the foetal or amniotic surface, but the edge of the cake folded upon itself forming a wedge-shaped mass, and is thus extruded from the vulvar orifice, its long axis corresponding to the long axis of the passage, and not transverse to it, as inversion or presentation of the foetal surface imply.

Now suppose we attempt delivery of the after-birth by traction upon the cord, what happens? Why, the placenta is inverted, the center of the disk presents at the os uteri, its circumference becomes puckered up, or folded into a cup shape, like an inverted umbrella, requiring at least twice as much space for delivery as is needed if it passes edgewise and only longitudinally folded. Moreover, into this cup-shaped cavity, formed of the placental mass, which now becomes a plug filling up the lower segment of the uterine cavity, flows the blood to fill up

the partial vacuum which is thus produced. Nay, more ; traction on this plug is exactly like traction on the piston of a pump. If hemorrhage does not naturally take place to fill up the void which tends to be formed beyond the placenta, then it is powerfully attracted and induced by the piston-like action of the placenta pulled by the cord. The interior of the uterus, already scarified by the separation of the placenta, requires but this pulling at the cord to be effectively cupped. But, on the other hand, suppose delivery of the after-birth by supra-pubic pressure be undertaken, what are the phenomena? Why, the placenta, instead of presenting broadside comes edgewise, its uterine surface glides along the surface of the uterus ; its foldings, parallel to the length of the maternal passages, are well squeezed together, and little space is offered for the reception of blood flowing from the uterine sinuses. The uterine walls keep close to the folded placenta ; the uterus contracts, forces the placenta downwards, and at last its body becomes nearly globular and empty—there is, in short, no hemorrhage worthy the name.

Let me concisely formulate the salient features and advantages of supra-pubic expression of the placenta :

I. We effect the speedy and safe removal of the placenta and so place the uterus out of its chiefest danger of hemorrhage ; for when the uterus continues its contractions after the birth of the child, so as to throw off the placenta in a short period, the chance of post partum hemorrhage is, confessedly, very slight.

II. Should post partum hemorrhage, however, finally set in, we have the uterus more immediately under our control. Hemorrhage usually occurs during complete or partial separation of the placenta, and while that viscus is still within the uterus ; and when it does supervene, it is generally in proportion to the non-contraction of the womb, and to the time during which the placenta remains unexpelled.

III. To assist the uterus to maintain its contractions for a short period after the birth of the child, in order to procure the separation and expulsion of the placenta, is assuredly a rational

method of diminishing the risk of hemorrhage; while, at the same time, it is the surest way to secure the permanent contraction of the uterus, and thereby conduce to a speedy recovery.

IV. A partially adherent placenta may oftentimes be detached by supra-pubic compression, thus reducing the necessity for the introduction of the hand into the uterus for the purpose of accomplishing its separation, to narrower limits—a consideration of no trifling value. To avoid misapprehension upon this point, however, let me add, that if we do not succeed promptly in effecting separation by this method, then no time must be lost, if there be hemorrhage from a partially adherent placenta, in proceeding to invade the cavity with the hand and extract it.

V. A fifth advantage accruing from this plan is, undoubtedly, a diminution of cases of retention of the placenta from the so-called hour-glass contraction of the uterus.

Since the principal purpose of this paper is to consider the prophylaxis of post partum hemorrhage, I might with propriety leave the subject right here. But there are some other points in the therapeutical management of these accidents to which I desire to call attention, and with your permission, Mr. President, I will proceed to notice them now.

Let me suppose a case of hemorrhage occurring after the complete evacuation of the uterus, where the organ refuses to contract and close the orifice of the torn and bleeding utero-placental vessels; where in spite of supra-pubic compression, friction, ergot, the use of nervous and cerebral stimuli, cold in various ways, etc.; in short, where all the milder expedients, well known to us all, have failed to produce sufficient shrinkage of the uterine muscle to obliterate the blood-vessels and thus *safely* stop the flow.

I present a case where the hemorrhage has failed to be controlled by the use of any or all the usual and milder expedients; where the symptoms are most urgent and where we realize that if the flow continues much longer, a fatal termination is inevitable. It cannot be denied that now and then such a case is

met with in spite of the most completely organized prophylactic method. It may be the result of a prolonged and exhausting labor, when the uterus seems to have expended all its contractile power in expelling the infant; it may occur in a pale, weakly, anæmic female, with an enervated constitution, already exhausted by previous disease; or it may result from a hemorrhagic diathesis. Whatsoever the primary cause of this direful condition of things may be, it is due now to a suspension of the excito-motor function, and this sluggish, this inert, this paralyzed uterus, so to speak, must be awakened to activity by some powerful stimulant, and that instantly, or the patient will die.

Under these conditions what must be done? Many are the methods suggested, but the all-important question is, which is the best one for the case unto which we may be ministering.

Dr. Barnes says inject the perchloride of iron; and, no doubt, under his skilful hand it is a potent and useful remedy. If the blood be still running, it is instantly seized at the mouths of the vessels, which become sealed up with coagula. It also constricts the inner surface of the uterus, and thus further closes the vessels. The system then has time and opportunity to rally, and by and by the contractile power returns.

But, is it a remedy entirely devoid of danger, *per se*? If we analyze the testimony of the men who have the greatest experience in its use I fear we shall arrive at the conclusion that, in not a few instances, has the injection itself caused death; and even Dr. Barnes, himself the first to propose, and the strongest advocate of the remedy, admits its danger under certain conditions. To quote his words, in which he clinches a powerful argument for its use: "If occasionally death follows and is apparently accelerated by the iron injection, we have, on the other hand, to remember that it was used as a last resource, when the patient was likely to die even if nothing were done, and that even under these unpromising conditions *many lives, to all appearances doomed, have been saved.*" These words, from the pen of one of the most distinguished obstetricians in Great

Britain, must carry great weight, and particularly when we reflect that he is a man who always has "a reason for the faith that is in him."

Dr. Lombe Atthill, the distinguished ex-president of the Obstetrical Society of Dublin, has thrown the weight of his powerful influence in favor of the use of styptic injection. In relating a case which he lost from post partum hemorrhage, and whose bedside he never left from the termination of the first stage of labor until her death, he says: "Moreover, I regret to say, I did not inject the perchloride of iron. It was the first case of severe hemorrhage which occurred in my practice after the method had been brought under my notice by Dr. Barnes; and, like many of my brethren now-a-days, I feared to use this, to me, new and powerful remedy. I now firmly believe that to this timidity the death of my patient—a young wife, and a young mother—was due. I feel that she might still be alive if only I had used a remedy I knew of, but had not the courage to employ. This, however, I have to compensate me, that though since then I have stood beside the bed of more than one whose life seemed to me in greater peril than hers, to whom I have just alluded, no such scene as that I then witnessed followed, nor do I believe it ever will again. The lesson I that day learned taught me the utter inutility of ordinary means at our command for the arrest of post partum hemorrhage in a certain class of cases."

He then relates, in detail, several cases where he successfully injected the iron styptic, and concludes as follows:

"For myself, I have arrived at the following conclusions:

I. "That cases of post partum hemorrhage occur in which the injection of the perchloride of iron, or some similar styptic, is alone capable of arresting the hemorrhage.

II. "That the injection of such styptic does not necessarily increase the tendency which exists in such cases to the occurrence of pyæmia, septicæmia, or peritonitis.

III. "That the treatment is especially applicable to anæmic patients, and those of a hemorrhagic diathesis.

IV. "That while it should never be had recourse to unnecessarily, it should not, on the other hand, be delayed too long."

Other obstetricians, of prominence in that country, take ground in opposition to this method, the chiefest of whom is Dr. Snow Beck; while on this side of the water it has its advocates and its opponents, as well. My own experience with the remedy is limited to a single case, in which it succeeded admirably; yet, I confess, I should hesitate, in view of all that has been said of its deleterious effects, to inject it again except in the direst necessity. I should be disposed, instead, to swab out the uterus with a sponge saturated with the styptic.

The injection of the tincture of iodine has been used with much success in post partum hemorrhage, and its advocates say that in comparison with the iron it has the advantage of being perfectly safe. Besides this the antiseptic influence of the iodine upon the uterine and vaginal mucus membrane is well known. As an excito-motor agent iodine is probably, at least, equally as good as the iron, while incapable of causing thrombi in the uterine vessels. In view of these facts one would feel justified in resorting to the iodine earlier than to the iron, and in this respect also an advantage may be gained for the patient, since the use of the iron is expressly limited to cases deemed hopeless under ordinary management.

Another most effectual method of controlling post partum hemorrhage is by the injection of hot water into the uterine cavity. The superiority of hot to cold water, as a hemastatic in surgery, has come to be pretty well understood by the profession in general. All surgeons who use hot water when making operations agree that it is vastly to be preferred to cold, and that nothing could persuade them to go back to the old way. There is no class of operations which have so rapidly advanced, in point of safety, as abdominal sections, and one of the chief

precautions acknowledged to be desirable in that class is that the peritoneum shall be kept warm. Fancy an ovariologist to-day sponging out the abdomen with cold water during the operation! Such a spectacle would cause a universal shudder of horror from an insulted and outraged profession. It has been suggested that, when used against post partum hemorrhage, hot water acts on nerve centres situated in the substance of the uterus itself. This action may be direct, or it may be reflex, or it may be both. It certainly is a remedy which possesses the advantage of being easily attainable at all times, and so far as we can judge, it also possesses the invaluable merit of being absolutely safe.

Dr. Penrose of Philadelphia, a most accomplished obstetrician, has somewhat recently brought to the notice of the profession a remedy, which, if it is capable of accomplishing all he claims for it, should take a place in the front rank, if, indeed, it should not supplant all the others, in the treatment of post partum hemorrhage when not controlled by ordinary methods. This remedy is common vinegar, and his method of using it may best be described in his own words. He says: "I pour a few tablespoonfuls into a vessel, dip into it some clean rag or a clean pocket handkerchief. I then carry the saturated rag with my hand into the cavity of the uterus and squeeze it; the effect of the vinegar flowing over the sides of the cavity of the uterus and through the vagina is magical. The relaxed and flabby uterine muscle instantly responds. The organ at once assumes what I will term its gizzard-like feel, shrinking down upon and compressing the operating hand, and in the vast majority of cases all hemorrhage ceases instantly; should one application of vinegar fail to secure sufficient contraction, the hand can be withdrawn, and a second or even a third application can be made, until the uterus shall contract sufficiently to stop the flow of blood."

He claims the following advantages for the remedy:

- I. It can always be easily obtained—every household, even the humblest, having a vinegar cruet.

II. It can be applied instantly and without apparatus.

III. It always cures the hemorrhage, or rather, I should say, it has never failed to do so in his practice. It is sufficiently irritating to excite the most benumbed and sluggish uterus to contract, while, at the same time, it is not so irritating that its subsequent effects are injurious.

IV. It is an admirable antiseptic. Professor Zweifel of Erlangen, in a paper published not long ago on the prevention of puerperal fever, considers vinegar an excellent substitute for carbolic or salicylic salts.

V. It acts on the lining membrane of the uterus, and on the gaping orifices of the torn utero-placental vessels as a valuable astringent.

But, gentlemen, I am admonished of the flight of time, and that I have already exhausted your patience, though, by no means, have I exhausted this interesting subject. While, therefore, it would have been satisfactory to have discussed the treatment, not merely of hemorrhage when caused by uterine inertia, but when due to some of the other causes to which I referred at the outset, I must yet forego the pleasure it would have afforded me to do so.

I should be glad, also, to make some reference to other remedies employed in the treatment of post partum hemorrhage—notably among them the hypodermic use of ergotine, galvanism, and the subcutaneous injection of sulphuric ether, as recently recommended by Macan of Dublin—but I cannot consent to further trespass upon your valuable time.

Let me, in concluding this paper, formulate some of the doctrines, which it has sought to enforce.

My first proposition is—

That post partum hemorrhage can, in a large majority of cases, be prevented by a proper management of the third stage of labor. After labor the obstetrician should force the uterus into a condition of firm contraction, and should not consider the third stage of labor as completed with the delivery of the

placenta. The expulsion of the placenta is not the third stage of labor, although it usually occurs during the third stage. It is an epiphenomenon of this stage. The third stage of labor may be defined as a tonic contraction of the uterus; in this stage there can be no hemorrhage, and to secure it is the object of all methods proposed for the relief of post partum hemorrhage.

My second proposition is—

That when the excito-motor function is suspended; when neither by peripheral excitation, nor by centric stimulus, the nerve force can be drawn or sent from the spinal cord to the uterus in sufficient intensity to cause contraction of the uterine muscle, and thus obliterate the torn orifice of the utero-placental vessels, then it is that intra-uterine injections or swabbings become a most precious method of rousing the sluggish, relaxed and almost paralyzed uterus into action. I should advocate their use in the following order:

1. The injection of hot water.
2. The swabbing of the uterine cavity with vinegar.
3. The injection of iodine.
4. The swabbing of the cavity with the iron styptic, or, finally, the injecting of it into the uterus, since there are undoubtedly cases in which the latter will alone arrest the hemorrhage—cases in which I should stand in much greater fear of the bleeding than the remedy.

Finally, and as the sum of all, permit me to offer the suggestion that we should never attend a case of midwifery unprepared to meet the possibility of post partum hemorrhage.

The careful practitioner will always go armed with ergot, opium, ammonia, a good syringe, and some form of styptic or iodine; for, should the emergency arise, he will have no time to send for them. These form an essential part of the armamentarium of the obstetrician, to be supplemented with patience, firmness, a clear head, a kind heart, and above and beyond all, that inestimable element, contributing alike to the success of soldier and physician—*courage*.

AMPUTATION OF LEG.

BY U. C. LYNDE, M. D.

AMPUTATIONS OF THE LEG IN ITS CONTINUITY.

Of all the amputations made in continuity in the two extremities, that of the leg requires the most care, time and experience. As there are two bones, one small and the other large, care is required while sawing them through that the greater is not cut shorter than the smaller, and that the smaller is sawed through first; and as it is after these amputations that erysipelas, necrosis and pyæmia are most common, therefore, the greatest care is requisite that no spiculæ of bone are left; that the periosteum is uninjured; and, in cases of amputation for injuries, that no soft parts that have been in any way seriously injured are allowed to constitute any portion of the stump. In doing this, sawing off the spine of the tibia, and in securing the vessels here, more time is required than in making amputations elsewhere in continuity in either extremity. Here the surgeon has the sharp spine of the tibia covered anteriorly with nothing but skin, while posteriorly, especially in the calf of the leg, he has a superabundance of soft parts. From this unequal distribution of the soft parts, he must form a covering for a bone, the most irregular in shape, and the most liable to disease, specific and traumatic, of any of the long bones. This stump must bear the greatest amount of pressure of any that the surgeon makes. These facts render experience especially valuable in selecting the site from which the flaps are to be chosen under different circumstances, the number of flaps, and their shape, length, breadth and thickness.

MORTALITY COMPARED WITH THIGH AMPUTATIONS.

In comparing the mortality of this amputation with that of the thigh, the fact must not be overlooked that while a large percentage of all the fatal cases of the latter can be ascribed to shock, it is very seldom that death, from amputation of the leg,

is owing to this cause. Setting aside the cases in thigh amputations that prove fatal in consequence of shock, the mortality is but little more than that of the leg.

TOURNIQUET USED.

The best way to control hemorrhage while the operation is being made, that I am acquainted with, is by means of the rubber bandage. When ready to operate, I elevate the foot (if it is not too much mangled and its condition does not forbid) for a minute or so, and while it is still elevated, I apply, tightly, the bandage just above the knee. Properly applied, it controls the circulation perfectly, enabling the surgeon to complete the operation without the loss of an ounce of blood.

METHODS OF FORMING FLAPS, ETC.

The method of amputating, in the leg, varies, with some surgeons, with the particular site at which the amputation is made, some choosing the circular amputation at the lower third, while making the flap operation above, some only making the flap operation, whatever the site. Others confine themselves to the circular operation; while others, still, operate by the modified circular, or the modified flap. Some, in making their flaps, choose them from the sides, others from the anterior and posterior surfaces of the leg. Some make use of but one flap, a long anterior; but the most of surgeons make two flaps; a long posterior and a short anterior; a long anterior and a short posterior; or, a long external and a short internal.

These flaps, too, vary in form and thickness, some only making the oval, others only the rectangular. Some confine themselves to the use of the skin, while others include more or less of the muscular tissue. All claim the superiority of their particular method. That so many different methods of forming the covering of stumps have been and are now practiced with a tolerable degree of success demonstrates, conclusively, that however wedded to one or the other any surgeon may be, he has an opportunity to choose this or that method, as circumstances

demand. The surgeon who would not utilize the sound, soft parts that might be left on either side of the leg, and so content himself with making a single flap operation, thereby saving for his patient one to three inches in the length of his limb, certainly is not conversant with the results following this method of amputating; and though he had never heard or known of an operation being made with one flap, he should know, not only that such an operation would offer a good prospect for a useful stump to his patient, but that it was his duty to confine himself, in any particular case, to the only legitimate means at his command. Should the soft parts in the leg, at any particular point, be sound through its entire circumference, and unsound immediately below this point, or, should the limb be cut completely off, as sometimes happens, leaving the soft parts healthy above, no surgeon can fail to see that in order to secure the greatest length to the stump he must content himself with the circular amputation. Ordinarily the single flap requires an unnecessary shortening of the stump, and for this reason, if for no other, should only be resorted to in exceptional cases. But the greatest objection to this method, especially when the flap is made only from skin, is that of its liability to slough. After injuries, the conservative surgeon will sometimes choose one method, and sometimes another, practicing his favorite method only when circumstances do not forbid it.

My own preference has always been for the flap operation. It has always seemed to me that by this method the relation of the parts to each other, skin to fascia, fascia to muscle, blood vessels and nerves to all, was less disturbed in forming the flaps than by any other method; that in dressing up the stump after the formations of its coverings a nicer apposition of cut surfaces was secured; that in consequence of the latter circumstance an earlier union would take place; that the operation was easier of execution, and more rapidly performed, and that it afforded a better covering to the bone, and consequently it secured for the

patient a greater degree of comfort in the use of an artificial limb. In making amputations of the leg, whenever circumstances permitted, I have invariably operated by this method, and that, too, regardless of the site. Circumstances have, in some cases, driven me to make the circular, in others, some modification either of the circular or flap operation. In operating after injuries I have always utilized sound tissue in whatever way and manner I found practicable. No one can fail to see that the long cutaneous flap is more liable to slough than one made of the same length and breadth but with a thicker base; and, therefore, it has only been in those cases in which I had but this, alone, that I have been content to trust to such a covering. In operating on the leg, whenever the state of the parts has been such as to admit of it, I have chosen a short anterior, and a long posterior flap. In making these flaps, I first transfix the limb immediately posterior to the tibia and fibula, and so make my long posterior flap first. In fact, I always make my long flap first, from whatever surface chosen, and in whatever manner I may make it. As it is the chief covering of the stump, it seems to me the surgeon should make it while he is unlimited in his material. If it is to be made by transfixion, there are other reasons for making it first. By making this flap first, all liability of cutting the skin and subcutaneous tissues irregularly at the points of ingress and egress is avoided. The surgeon's mind will not be diverted from a close watchfulness over the guidance of the point of his knife about the bones, and from the proper breadth and length of the flap he is making, to the necessity of piercing the skin at a specific point. The limited flap will be left for the surgeon to make with his knife constantly under his eye from angle to angle. Finally, the flaps can be made in this manner with greater ease, confidence, and rapidity. When material enough is at the command of the surgeon he should cut his flaps long enough to come together without any tension, in the least, having to be exerted by the sutures; and there should be a little to spare, in anticipation of some swelling.

Should the stitches at any time become too tight in consequence of swelling of the flaps, and thereby threaten to destroy the capillary circulation in them, they should be cut, after which, if union has not already taken place, the dressings to be hereafter recommended will hold the flaps in position. When making an amputation through the calf of the leg, if the muscular tissue is well developed, it will be necessary to thin the posterior flap. This will be but the work of a few seconds, and is easily done by laying the flap in the left hand, while with the right the knife can be made to pear off from the inner surface such an amount as is thought necessary. The length of the flaps will be regulated by the size of the limb at the point of amputation. I have always used silk ligatures, and as I know I have never thereby lost a patient, and as they have always fulfilled (when I have applied them properly) every indication, I know of no sufficient reason for changing them for some other material with which I am not familiar. After having secured the blood vessels, the nerves should be looked up and cut short, that they may not have their ends become involved in the cicatrix, or be pressed against the rough end of the bone. In amputating near the ankle, it may be necessary to cut from the inner surface of the posterior flap some of the tendinous parts of the gastrocnemius and soleus muscles. Before closing up the flaps I apply water to their cut surfaces as hot as my hand can comfortably bear. This will prevent all oozing of blood from the smaller vessels. Having brought the ends of my ligatures to the angles of the stump, I close it up by taking four, five, or six sutures, depending upon the size of the flaps. Two strips of old muslin, four to six inches wide, and each consisting of four thicknesses, and long enough to go once and a half times round the stump, the one laid under the end of the stump at right angles to the limb, the other laid on top of the first and at right angles to it, and parallel to the limb, and directly under it, both having been saturated with pure tepid water, constitute my dressing; excepting a piece of old linen, also saturated with water, and folded

up and placed directly over the junction of the flaps. This last piece is for cleanliness, and can be changed every hour, if necessary, without any inconvenience. There are two folded up cloths under the limb, and one over the junction of the flaps. It is only necessary, now, to bring the end of the one parallel with the limb over the surface of the stump, after which the two ends of the cloth lying at right angles to the limb are brought over and around it, and all further attention can be trusted to the nurse for the next twenty-four hours. He should be directed to lay the ends of the two main cloths off the stump, and after removing the cloth immediately over the edges of the flaps, to place a like one that is clean in its stead as often as every three hours. Under all, leg and dressings, should be placed a rubber blanket for the protection of the bedding. No adhesive plasters, or bandages of any kind, are ever used. Once a day, or every two days, the large cloths should be removed and clean ones substituted. I have practiced this method, in the main, of dressing amputation wounds for fifteen years and I have yet to lose a patient by reason of it, never having lost a patient from sloughing of flaps, erysipelas, septicæmia, or pyæmia, excepting one, and he had been exposed in the cold for thirty-six hours with his leg crushed before I saw him. He was an employe on the Central railroad, was injured at East Buffalo, and remained in a cold car for the time mentioned. He had had a chill before Dr. Briggs and I saw him, and his crushed leg was greatly swollen. He was taken to his home on Seneca street, where we amputated his leg in the upper third. In a few hours this old man became delirious, and died after three days, evidently of septicæmia.

Clinical Reports.

CONGENITAL DISLOCATION OF BOTH HIP JOINTS.*

BY HERMAN MYNTER, M. D.,

Surgeon to Buffalo General Hospital.

The patient, a little girl, 8 years of age, was brought to my office a couple of months ago for treatment for spinal curvature, her parents stating that in their opinion the child instead of growing became smaller as the years passed. She had never complained of pain or sustained any injury, and I am free to state that I for some days did not discover the real nature of her complaint, and was inclined to look upon it as an unusual relaxation of the ligaments of the spine and muscular weakness. So much more as I never had seen a similar case, and expected that a patient with a double dislocation of the hips would be utterly unable to walk so well or have so free abduction and rotation outwards of the hips as she has. In regard to previous history, I may state that nothing unusual happened to the mother during her pregnancy with this child. The confinement was normal, the head presenting; no instruments were used, a midwife being in attendance. The child was small during its infancy, but did not try to walk before it was 3 years old. No physician was ever consulted. It has since been able to walk and run and jump, does not easily tire, being fatigued scarcely more than any other children of the same age, and is seemingly as healthy a little girl as could be wished. The parents consulted me, as I said, about the spinal curvature. Upon examination a curious picture presents itself. The pelvis is considerably inclined forwards, the buttocks abnormally projecting upwards and backwards, and we see a lordosis of the lumbar vertebræ, with compensating curve of dorsal vertebræ. The pelvis seems abnormally broad, and the trochanter major more prominent than usual and approaching the crest of the ileum.

* Read before the Buffalo Medical Club and patient presented.

The most notable feature is the great length of the upper as compared with the inferior part of the body. The muscles of the lower extremities are not so much affected in this case as usual, the thighs have an inward direction, and by walking would strike each other, if not on account of the peculiar gait. The feet are bent slightly outward and slight flat-foot is present. The gait is the peculiar rolling motion with "double lameness," characteristic of this lesion. It reminds me of the walk of a duck. When the child is lying down, the lordosis disappears by traction upon the legs, and the same occurs when you let the child sit down. She then sits on the ischial tuberosities, and having then no cause for tilting the pelvis, the lordosis disappears immediately.

By examining the motion of the hips, we find them perfectly free and easy, almost too free, with the exception of abduction in the flexed condition and rotation outwards. These two movements are not as free as usual, and if carried too far, are prevented by contraction of the abductor muscles. By measuring we find that the right trochanter is two inches above Nelaton's line, which measurement by traction may be reduced to one inch. On the left side the trochanter is about one inch above Nelaton's line; by traction this measurement is reduced to one-half inch. By traction the legs may be elongated one inch. The distance from the crest of the ileum to the trochanter may be increased one inch by traction. The heads of the femur are felt by rotation on the ileum, easiest when the child is lying on her abdomen. Congenital dislocations of the hip are, if not very rare, certainly uncommon. They are found oftener in girls than in boys. Of forty-five cases collected by Dupuytren, thirty-nine were females. The majority are double dislocations, only seven out of forty-five being single. The affection is by some believed to be hereditary. This belief rests on a statement of Dupuytren, which, according to Holmes, is insufficiently supported. The direction of the dislocation is upwards and outwards on the ileum; dislocations upwards and forwards have never been

found except in foetal monstrosities. The most interesting point, and that about which the authors differ most, is the etiology and pathology. The most important point to decide is, whether these cases are really dislocations, or, as Sayre and Bryant especially maintain, malformation of the acetabulum, namely, a non-fusion of the three bones which enter into its construction, or, as Breschet calls it, arrest of development. Bryant mentions a couple of interesting anatomical preparations, which have a distinct bearing upon this point, one in which the cause was want of depth from incomplete formation of the acetabulum (Cruveilhier's *Pathol. Anatomy*), another from the Middlesex Hospital Museum, in which there is practically no acetabulum but a strong capsule and a well-developed head of the femur without a ligamentum teres. Sayre objects to the name dislocation, as there never has been any luxation. Other authors believe the cause to be disease within the articulation of the foetus, especially synovitis. Holmes acknowledges that effusion taking place within the joint, dislocation might occur, but thinks that no proof has really been given that this has absolutely taken place. This view has been maintained by Sedillot and Malgaigne and was originally proposed by Ambrose Paré. It seems to me that if this view was correct we might, at any rate occasionally, find some traces of inflammation, some tenderness of the parts, the more that a synovitis, with an effusion great enough to produce a dislocation, surely is a very serious lesion and could not be expected to disappear perfectly within one-half year. It is a fact, that there is never any pain present at birth. Carnochan considers the defect a result of active morbid muscular retraction, on account of a perverted or disturbed condition of the excito-motor apparatus of the medulla spinalis. It sounds very fine, but I am unable to understand, what should produce this disturbed condition, or, if really present, why it should produce dislocation in the foetus, but never in a living child or adult. External violence has been mentioned as the cause since the time of Hippocrates. That it

may produce fracture is well proved, and that the accoucheur might, by manipulation and traction on the limbs in breech presentation, produce it, is within the realm of possibilities, but, as Bryant puts it, no evidence has been published to support this view. In no case has he been able to learn that a breech presentation took place. He heard, in the majority, that a natural birth occurred. My private opinion is, that the want of pain in congenital dislocation speaks absolutely against this view, and I believe that even an infant, immediately after birth, when it is handled so much, would make it so lively in a house, if it had a single, not to mention a double dislocation, that the cause would be discovered. But it is a fact, that the lesion is not discovered before the child commences to walk. At birth, as Holmes says, it passes unobserved, and there is nothing to attract attention to the displacement; it is painless, or, if not entirely painless, it is not observable, for the direction of the limb is not sensibly altered and the motion of the head of the bone is free.

In regard to pathology, it is asserted by Hamilton that the head of the femur may be changed in form and consistence, or be altogether wanting. The pelvic bones are usually more or less deformed; the acetabulum may be entirely deficient, or may present itself as an irregular, bony protuberance, without cartilage, fibro-cartilage or ligaments. Sometimes it exists as an oval or triangular cavity, which is expanded at its superior and posterior margin into a distinct fossa where the head of the femur occasionally rests. A new cavity is formed, usually upon the side of the pelvis, which is shallow and without an elevated margin. The new socket is often lined with a true periosteum and synovial membrane. Sometimes the surface is hard and polished, like ivory. The head of the femur, having escaped from its original capsule, rests in the new socket constantly, or the head remains within its capsule, and may be observed to play backwards and forwards between the two sockets; or, the head and neck being absorbed and the capsule remaining entire,

the latter is converted into a long, narrow sack, or into a ligamentous cord. In this case no new socket is formed.

In regard to diagnosis, it is mentioned that this affection may be mistaken for coxitis. It is scarcely necessary to point out the difference in the symptoms of these two affections. It is more probable that it may be confounded with infantile paralysis.

Can anything be done to remedy this affection? Different authors mention different kinds of treatment, according to whether the dislocation is single or double, and whether it be discovered soon after birth, or years afterwards. The whole question, it seems to me, depends upon whether it really is a dislocation, or, what seems more probable, a malformation. If there is no acetabulum, or only an imperfectly developed acetabulum, in which there has been no luxation, as Sayre puts it, it seems useless to attempt a reduction. In a single dislocation it seems to me an attempt ought to be made as soon as discovered. There is in these cases at least a possibility that the dislocation may have been produced accidentally. Another point, having a distinct bearing upon the treatment, is whether we can decide if the head of the femur is inside the capsule or not. If inside the capsule, the looseness must necessarily be greater, as the head can play backwards and forwards as far as the capsule will allow it. If outside the capsule, an inflammation, with formation of osteo-phytes and a new joint will necessarily be the result, and consequently a considerable decrease of the mobility. Ought we not, therefore, to make some attempts to open the capsule and bring the head of the femur in direct contact with the ileum? This process is in reality what Guerin proposes: "The means which I adopt," he says, "are based upon a recognition of the processes which nature employs for the attainment of the same purpose. I have shown that the essential condition of the formation of artificial cavities is perforation of the articular surface and the placing in contact of the luxated extremity with an osseous surface, and that the condition of maintenance is the intimate adherence of the border of the rent with the circumference of the

new cavity." To do this he practices scarifications of the capsule down to the bone to which it is attached. By this means the dislocated extremity is placed in immediate contact with the bony surface, adhesion and fusion of the scarified points with the corresponding points takes place, and at last deep scarifications are made for the same purpose around the head, that it, by the fibro-cellular adhesion, may be imprisoned. Finally, when the fibro-cellular adhesions are supposed to be sufficiently solid, movements are begun, to develop a cavity for the head. I consider this whole process perfectly rational and feasible. If anything should be done, this is the only remedy. Bandages surrounding the pelvis can scarcely do any good, and Sayre's extension apparatus, it seems to me, is worse than useless. Necessarily it will take a long time to accomplish such a result. My little patient here walks, as you will see, so well that I scarcely could recommend a treatment which may take years to carry out. I do not in her case recommend anything except, when the time comes, to adopt a sedentary occupation, although from the great looseness of the joints I am inclined to believe that the capsula are intact, and that therefore this case would be a suitable one for Guerin's operation.

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Meeting, March 4th, 1884.

President, Dr. J. C. Cronyn, in the Chair.

Present—Drs. Rochester, Hopkins, Strong, Mann, Brecht, Mynter, Van Peyma, Coakley, O'Brien, Bartlett, Park, Putnam, Frank, Long, Parmenter, Granger, and, by invitation, Drs. Howell and Park.

Essay by Dr. Roswell Park. Subject: "Selected Topics in the Surgery of the Nervous System."

The subject was divided into three parts, of which the first was on nerve suture. The literature of the subject was first referred to, as well as some of the early experiments. The matter had now been before the profession in some shape or other for seventeen years, and various writers had reported cases, until now, as far as he could ascertain, some thirty odd cases were on record, nearly all of them successful. To these the Doctor desired to add two of his own. The first, a boy of thirteen, upon whom he was obliged to make an extensive operation for tuberculous caries of the bony pelvis and its contents. A large flap composed of the entire buttock was laid off and the sciatic nerve exposed. The flap was held aside with a strong retractor, when suddenly the patient, having been inadvertently allowed to partially recover from his deep anæsthesia, gave a wrench and turned partially over; by this procedure the retractor was hooked under the nerve and tore it completely through. The operation was completed as if nothing had happened, the major portion of the ischium resected, sinuses in the pelvis scraped out, and at its close the nerve ends were reunited by two catgut sutures. There was complete paralysis of sensation and motion for a week in those parts supplied by the nerve; but at the end of the second week sensibility was very nearly perfect and motility was completely restored.

The second case was that of a lad who cut some of the extensor tendons of the hand as well as the radial vessels and nerve. After two weeks the tendons and nerve were united by suture, with return of sensation and almost perfect restoration of function.

After the relation of his cases the Doctor gave some general directions as to the precautions to be observed and the carrying out of those details so essential to success; he also referred to the work of experimental physiologists in this direction, to transplantation of nerves, and to the fact that neither tetanus nor other untoward results of this sort of surgery had been known to occur.

The second part of the paper dealt with elongation of nerves. A brief history of the operation was first given, and then reference was made to its applicability in certain classes of cases, after which the reader reported five cases of nerve stretching. The first was for sciatica, with subsequent recovery; the second for tetanus, the brachial plexus being stretched, with amelioration of symptoms. The other three were done purely as physiological experiments, with the full knowledge and consent of the patients, for obscure nervous affections which had resisted all other internal and external treatment. In one of them there was slight improvement; in none did any evil result. After reporting the cases, the Doctor commented suitably on each one, and quoted cases where elongation had cured paralysis, disorders of sensation, and had even restored sensation in anæsthetic leprosy.

The last portion of the paper was devoted to the exploration of the brain by the hollow needle. The reader made the statement that he was not aware of any special literature bearing on the subject, but would report three instances in which he had made exploration of the hemispheres by means of the long needle of the hypodermic syringe in search after pus, of course after removal of a button of bone by the trephine. He brought forward his own cases to show how simple and harmless the procedure was, even if nothing but negative evidence was elicited.

The whole paper was an exceedingly practical one, and contained many references to the literature of the first two topics discussed. It will probably be published hereafter in full.

Discussion—Dr. Rochester expressed his interest in the subject, and his pleasure in the paper presented. He related a case of tetanus in a married woman. The injury was a nail in the foot, followed by pain, and in four days slight symptoms of tetanus. Patient placed in bed; wound searched for foreign body. Bromide, gr. 30, morph., gr. $\frac{1}{2}$, given every four hours. The Doctor remarked that he knew the two remedies were considered incompatible, but they were the only ones he had known

to do any good in this disease. The patient got better, but against orders left the bed, and the inflammation returned, with a return of the tetanic symptoms. Dr. Mynter was called. He enlarged the wound, again searched for foreign body, and severed the nerve. Hypodermic injections of physostigma were given without controlling the disease. Patient died in five days after second attack.

Dr. Strong asked about the transplantation of nerve, and also how much force could be used.

Dr. Mynter expressed much interest, and also praised the frankness of Dr. Park in criticising his own cases, and being willing to report a case in which there was an error in diagnosis, saying it was too often the habit to speak of one's successes and forget any mistake. He reported a case of laceration of the hand where he united tendons, but searched for and could not find the nerves. He used antiseptic measures, and placed the hand in a splint. There was good recovery with slow return of movement, and slower but very fair return of sensation.

He favored nerve stretching for neuralgia, but never saw a case of sciatica bad enough to operate upon. He had tried one case by hyperflexion of the knee, under chloroform, with good result. Also reported a case of trephining for epilepsy. A man, at thirteen years of age had a fracture of the skull. There was depression, and when the spot was pressed upon showed a very sensitive point. Increasing severity of the fits, and deepening dementia, decided him to operate. Several buttons of skull were removed, and a center splinter that extended into the brain. Acute mania followed, and he died in four days. Autopsy showed an abscess and atrophy of the side of the brain and dilatation of ventricles.

Dr. Coakley spoke of the reproduction of nerve tissue, and quoted Dalton as authority that nerves, like muscles and bones, were reproduced.

He asked why Dr. Park taught that gun-shot wounds should not be freely explored. He was always in the habit of using the finger as a probe.

Dr. Putnam spoke of section and stretching of nerves. He quoted Anstie as denouncing section of nerves, and says it gives no success except in neuralgia of fifth pair, and says section of others should not be made. He also claimed that experiments upon the cadaver showed that the sciatic nerve could be stretched an inch by hyperflexion and other manipulations. Of the value of nerve stretching, he said that surgeons advise and physicians decry it. He also claimed, still quoting from Anstie, that a careful analysis of cases showed few recoveries but many cases temporarily benefited, and claimed the best results after all other treatment failed was found in the continued current.

Dr. Frank saw two cases of nerve stretching without benefit. He spoke of a case reported a year ago of circumcision for convulsions, with entire relief; and also of another case reported cured in a journal.

Dr. Van Peyma asked for information in regard to nerve reuniting.

Dr. Cronyn spoke of the importance of many details of the paper that might seem unimportant to many; yet they were of great practical value. It was well to remember that in nerve suture there was one particular way to introduce the needle so as to injure the fewest number of nerve fibers. The whole subject is on trial, and the discrimination of cases is yet to be made. He spoke of a case of fracture of the right occipital bone. He cleaned wound, and dressed it; but four days after, while straining at stool, hernia of brain took place. Convulsions followed, and chloroform giving no relief, he ligatured the mass of brain, as large as a pullet's egg, and cut it off. The convulsions ceased, child recovered and is now living, a bright person, having gone through the public schools. He spoke of another case, in which a child received a gun-shot wound. The bullet passed through left orbital plate. After recovery the child had forgotten how to read, and did not know one letter from another, but his arithmetic was improved. He learned over again.

Nine years later the child was killed by a blow on the other side of the head, and bullet was found encysted.

Dr. Park, replying to questions and criticisms, said that just how much stretching a healthy nerve will bear is uncertain. One experiment showed the sciatic would sustain a weight of 80 kilogrammes, another 75 kilogrammes, and a third 180 pounds. His rule was to lift the limb entirely by the nerve and pull both ways. Pulling from above gives irregular nerve action. Newer teaching forbids doing anything to gun-shot wounds until ready to operate and everything is at hand. In regard to difference of opinion between surgeons and physicians, he thought failure to obtain results was often due to timidity, and therefore failure to properly stretch the nerve. The sensitive fibres were first paralyzed, and greater force is required to affect the motor nerves. It is difficult to say how nerves regenerate. Lower animals more easily reproduce lost tissue, and the higher the tissue the more difficult the reproduction. As much as two inches will fill in. First, there is cicatricial tissue, then vessels are thrown out, and finally nerve fibres meet. In sutures of freshly cut nerves there is first degeneration of the lower end, and then gradual reproduction of tissue.

Voluntary Communications—Dr. Park presented a specimen of trichina, a microscopic preparation.

Reports of Prevailing Diseases—Dr. Rochester reported three fatal cases of diphtheria in one family, and also noted the fact that the three other children escaped by being removed from the house. He thought they contracted the disease at school.

Dr. Hopkins reported bronchial catarrh and pneumonia.

Dr. Bartlett reported some diphtheria, some whooping cough, measles and scarlet fever, with little rash.

Dr. Frank reported measles and mumps.

Dr. O'Brien reported measles and bronchitis.

Dr. Van Peyma reported measles, scarlet fever and bronchopneumonia.

Dr. Coakley reported rheumatism.

Dr. Cronyn reported sore throat without rash, and calls it herpetic form of tonsillitis.

It was announced by the President that Dr. M. D. Mann would read essay at the next meeting, in April. Subject: "Axis Traction Forceps, with Exhibition of Instruments."

WM. D. GRANGER, *Acting Secretary.*

Editorial.

IMPROPER DRAINAGE AND DISEASE.

In our recent report of the annual commencement of the Buffalo Medical College, reference was made to a paper on "Common Defects of House Drainage," read before the Alumni meeting by Dr. William F. Sheehan, Health Physician of the city of Rochester, N. Y. The paper was generally considered one of unusual interest, the presentation of the subject being materially aided by the exhibition of illustrations magnified and projected by means of the stereopticon. To hear the interesting remarks and see the apt and apparently corroborative illustrations, was to feel the impulse of agreement and of thankfulness that the etiology of a large class of diseases was clearly and incontrovertibly established. But, prompted though it may be by a constitutional predisposition to skepticism, we are yet led to ask, may this not be but another instance of the wish being father to the thought? The human mind, constantly striving to enlarge its field of well-defined and perfect vision, hails eagerly the faintest indications of the promise long deferred. We wonder not at this, neither do we murmur, if, as many times occurs, the evidence be unauthenticated and the welcome prove premature. On the contrary, by these repeated disappointments we are taught the inherent difficulties attending the elucidation of all scientific subjects. In a special degree should these difficulties be recognized in the study of the broad and complex subject of the

etiology of disease, and here as elsewhere must we make full allowance for our natural proneness. Too often is conviction the offspring of predilection. Touching the question under discussion, we should remember that the arguments, positive and convincing as at first sight they may appear, are yet opposed by a vast amount of negative evidence. Negative evidence thus accumulated is justly entitled to serious consideration. And it should be borne in mind by those impressed with the seeming corroboration furnished by the illustration that these were purely diagrammatic, so far as the essential point of filtration is concerned. The proposition that defective drainage and diseases bear to each other the relation of cause and effect may be true or it may not. It is not our present purpose to deny the possible truth. When, as seems not impossible, future additional observation and experiment shall have established the fact, it will, indeed, be a grand and positive advance in sanitary science. But meanwhile, we consider it opportune to warn against ill-considered judgment, prompted rather by a fixed though laudable desire than authorized by the present state of our limited and immature knowledge. While it is the obvious duty of every physician to promote the cause of medical science and to accept its discoveries so soon as they are such, in truth, no good has ever or can ever come, but rather much harm, from hasty acceptance of supposed facts. The medical man, no less than the worker in other fields of science, must be both progressive and conservative and know how to combine these qualities judiciously.

Relative to the subject under discussion, and to this we shall limit our direct criticism, we have already alluded to the fact that much negative evidence remains, apparently offering serious obstacles to its implicit and unquestioned acceptance. And since the positive argument has enlisted so many exponents and occupied so much of the thought of the profession, we feel it our duty to call attention to the fact that the matter as yet remains unproven—that the subject, like the bronze and silver shield in the legend, has two sides, which must receive equal and impartial attention, before we can venture to express an

opinion or form a conviction. As yet the matter lacks the positive proof necessary to establish a scientific truth. Every scientific man recognizes the difficulty of these and kindred subjects; the arduous, repeated and guarded observations and experiments, as well as the patience and discrimination necessary to determine the most insignificant point in science.

The argument of the advocate is essentially expressed in the following syllogism:

First premise: Certain diseases are prevalent in a given locality. Second premise: In these localities drainage is many times, perhaps even generally, found to be defective. Conclusion: Ergo, the defective drainage is the cause of the prevalence of these diseases. With the laity of the present, as with the profession more particularly, though not exclusively, of the past, the phrase, *Post hoc ergo propter hoc*, is the almost universal and invariable channel of reasoning. How thoughtless and narrow-minded, say we of to-day; and yet the same phrase, slightly altered as follows, *Apud hoc ergo propter hoc*, would seem to be the motto of many of our medical brethren. Admitting this as correct or logical reasoning, what a plausible treatise might not be written, proving the causative relation existing between the enclosure of dwellings by picket fences and the peculiar susceptibility of the inhabitants to borborygmi.

But it is not our purpose to ridicule a theory which presents considerable supporting evidence and is daily becoming more probable. To establish the fact, however, it must be clearly and indubitably shown, not in singular cases but in the vast majority, that the coincidence is more than a simple coincidence, and in reality exhibits the relation of cause and effect. This is yet far from having been accomplished.

To do this it must first be explained how the supposed causes, having existed for an indefinite period, have remained so long inactive, and again become so after the disease has disappeared without any measures having been taken for their removal or mitigation. To say that the production of disease requires the coincidence of still another factor, such as, for ex

ample, a temporary susceptibility, may explain but fails to answer the vast amount of negative evidence and the apparent contradiction of certain well-established facts. As an example of the latter: In a family of six persons scarlatina attacks one of the six and consecutively the remaining five. If in these cases the cause was one of constant and uniform existence, should we not expect the attacks to have been more nearly contemporaneous? The reply that in this case the disease spread by infection, the original infection being from without, is probably correct. But can we doubt that in such a case many an aspiring advocate of the claims of defective drainage would have found this to exist, and have ascribed the disease to its vicious potentiality. Is defective drainage, measured by the standard of perfection laid down by experts, not the the rule rather than the exception? Rare are the dwellings where numerous violations of asserted sanitary laws, including defective drainage, cannot be found. Again, in the case of the supposed infection of well water, the remarkable filtering power of most earths must receive its due consideration; and it must be remembered that to find sodium-chloride and phosphate is not always to have shown the containing water poisonous. The various objections, more or less applicable and forcible, are found on every hand, and intrude themselves upon every thinking and impartial mind. And here, as elsewhere throughout the domain of science, their mission is to warn us, that while promoting and welcoming every positive gain in knowledge, it yet behooves the physician to guard vigilantly against rash conclusions and too implicit and uncritical acceptance of unproven *dicta*.

FACE PRESENTATION, MENTO-POSTERIOR POSITION.

At a recent meeting of the Medical Club, Dr. M. D. Mann reported a case of labor with the head in the mento-posterior position, in which the patient, being fully anæsthetized, he succeeded in bringing down the vertex, thus converting the exceedingly untoward position into one entirely favorable. This

rather unusual result was accomplished by means of one hand in the vagina, pressing up the chin and face, while the other hand, placed externally over the pubic region, was employed in pushing down the occiput. The unfavorable position, however, continued to repeat itself at each subsidence of the anæsthetic condition, and was as often corrected by the doctor, until at last the delivery was accomplished by applying the forceps while holding the head in its favorable position. We may also notice that the Tarnier axis-traction forceps, recently described in the JOURNAL, as also in the recent work of Lusk, was employed in the earlier stage of the delivery. During the discussion, the possibility of natural delivery, with the head remaining in the mento-posterior position, was denied, but as will be seen from the following annotations, such cases have been reported and the mechanism variously explained.

Cazeaux says ("Theoretical and Practical Midwifery," pages 341-2):

1. The rotation just described, whose object is to bring the chin constantly towards the symphysis pubis, and which has been spoken of as absolutely essential to the spontaneous termination of the labor, may not be executed. But such very rare exceptions do not in the least discredit the general principle before laid down, for they may all be referred to those instances where the dimensions of the head are small relatively to those of the pelvis; or else to those cases in which the position of the face has been spontaneously converted into one of the vertex. True, Madame Lachapelle has known the face to escape from the vulva in a transverse direction, or nearly so, in two or three instances; but she carefully adds that they were very rare exceptions.

And again (pages 343-4-5):

2. As regards those varieties in which the chin looks backwards, we have already stated that it is necessary this part should come round in front, though some cases of mento-posterior positions, that terminated spontaneously, are found in the books, where the chin did not get under the pubic arch; writers differ

in their explanations of this anomaly. M. Velpeau takes as an illustration the mento-sacral variety, or the second position of Baudelocque, in which the chin is turned toward the anterior face of the sacrum (though we may observe, in passing, that this position is scarcely admissible); and he remarks that, as the chin does not rotate in front, the following phenomena may then take place: the forehead engages behind the body or the symphysis of the pubis, while at the same time the chin gets below the sacro-vertebral angle. The whole head descends into the excavation beyond the anterior plane, and the face drags after it the front surface of the neck, and even the upper part of the chest behind. The occipito-mental diameter, which still represents the axis of the strait very nearly, now begins to perform a see-saw movement from above downwards, and from behind forwards. The chin, penetrating further and further towards the bottom of the excavation, though at the same time retained by the thorax, which cannot advance, forces the sagittal suture to slip down behind the pubis, and the forehead to gain the upper part of the inferior strait. The frontal protuberances soon find a point of resistance on the perinæum, and the posterior fontanelle descends in turn, and ultimately appears at the summit of the arch, when the head finally escapes from the vulva as it would in an occipito-anterior position: whence it follows, adds M. Velpeau, that the *occipito-frontal is the greatest diameter* which can present at the planes of the strait. But we cannot admit the truth of this last proposition; for if, as he says, the chin is in relation with the anterior surface of the sacrum, and it *descends* more and more, while the occiput slips behind the pubis, it is evident that the *occipito-mental* diameter must, at a given moment, traverse the antero-posterior one of the excavation. Now, as this is clearly impossible, we have to reject M. Velpeau's explanation altogether. Beside, the cases observed by Smellie and Delamotte, which he cites in support of his theory, prove nothing at all, for, in both of those instances, the fœtuses were small and dead, and the woman had, on former occasions, been delivered of voluminous children.

M. Guillemot has explained the spontaneous termination of the labor in these cases somewhat differently; for when the chin does not rotate in front, the labor, according to his idea, may terminate in two ways, namely: 1st. The forehead continues to descend and to engage under the branch of the pubis until the anterior fontanelle appears at the vulva, which progression permits the chin to advance forward and reach the border of the perinæum; then the process of flexion commences, etc. But we cannot conceive how, in the forced extension of the head on the thorax, it is possible for the chin to arrive at the anterior perineal commissure by traversing the whole posterior plane of the excavation, because, from all evidence, the breast must engage extensively along with the head, which is wholly impossible, unless it be a case of abortion.

2d. The labor by the face may be converted into one by the vertex; and this always takes place, he continues, in the following manner: the face being forcibly pressed on, and unable to escape through the perineal strait, has a natural tendency to pass towards those points that offer the least resistance. Here, this condition is found above and behind, whence the chin leaves the perineum and approaches the foetal chest by ascending along the hollow of the sacrum towards the sacro-vertebral angle, and the forehead following this movement corresponds to the sacrum in turn; the vertex is depressed and slips behind the pubis, and, just at the moment when the chin applies itself to the child's breast, the occiput engages under the pubic arch. He further supposes the face to be sufficiently engaged for the chin to come in contact with the perineum; but, as we have already stated, this is impossible, on account of the extent of the conjoint diameters of the head and breast, both of which would be deeply engaged in the excavation.

But, even admitting the chin should descend so low, where is the power to make it subsequently rise up in the hollow of the sacrum, the cavity of which is occupied, whatever M. Guillemot may say to the contrary, by the deeply engaged breast? For the uterine contraction, which is always transmitted by the

spine, acts at first on the chin as a consequence of the reverted position of the head (as M. Velpeau clearly recognized), and it is only because its power is adequate to make the latter descend any further, that its action is transferred to the other extremity of the fronto-mental diameter, that is, to the forehead, which it then depresses, according to the theory of Guillemot. Again, even supposing that the chin may remount, it is scarcely possible to believe that it gets above the sacro-vertebral angle; it must, therefore, constantly remain in contact with the anterior surface of the sacrum; and, consequently, at a given moment, the occipito-mental diameter must traverse the antero-posterior one of the excavation.

In my estimation, therefore, we are not to understand this as the true mode by which the mento-posterior positions of the face are converted into occipito-pubic ones; indeed, among all the cases I have been able to consult, I have only found there in which the chin was in direct relation with the anterior face of the sacrum, viz., those of Smellie, Delamotte and Meza (reported by Guillemot).

Now, in the one furnished by Smellie, it is positively stated that the child was small, that the woman had a large pelvis, and that she was usually delivered very promptly. Delamotte says nothing about the head and the dimensions of the pelvis, in his case; and lastly, Meza was obliged to apply the forceps, in the one reported by him; of course, that was no longer a spontaneous termination, for it would be an easy matter to demonstrate that the application of the forceps may act in an altogether different manner, and even more advantageously, than the uterine contraction in this instance; besides, the reader will not forget that, in the first two cases, the children came away dead.

All the other observations may be referred either to the right or the left mento-sacro-iliac positions; and, in these latter, it appears to me that a spontaneous termination of the labor might occur without a simultaneous engagement of the chest and head; for instance, let us suppose that the child is in the right mento-sacro-iliac position; then, after the complete extension of the

head, the face will descend into the excavation as far as the length of the neck permits, and consequently the chin will reach the level of the great sciatic notch, the more so as the form of this portion of the ilium, which is shaped like a cone, will favor the movement of downward progression. Having arrived at this notch, the chin will there encounter soft parts, which it can very readily depress, and this depression will be quite sufficient to augment the length of the oblique diameter of the excavation from a quarter to a half an inch, thereby permitting the occipito-mental diameter to clear it, and the head to undergo the process of flexion, that will gradually bring the occiput under the pubic symphysis.

Robert Barnes ("Obstetric Operations") remarks as follows: "The birth of a full-grown living or recently dead child, with the forehead maintaining its direction forward, is almost impossible. The extension of the neck is extreme, the head being doubled back upon the nucha. The chin represents the apex of a wedge, the base of which is formed by the forehead, the entire length of the head, and the thickness of the neck and chest. This must be equal to at least seven inches. The vagina and occiput become flattened in, it is true, but much is not to be expected from moulding." Regarding the method of delivery and the means of aid, he says: "In the mento-sacral position you deliver by promoting flexion; or, to take our illustration from the mechanism of face labor, you obtain flexion by causing the chin to turn over the coccyx or sacro-sciatic ligament as a center instead of over the symphysis. The latter is the natural mode, but it may be that the first alone is possible. This is a case in which incision bilateral of the perinæum here acting as an obstructing posterior valve, may be performed in order to facilitate the release of the chin." Lusk, in his work on the "Science and Art of Midwifery," says: "In a fœtus of small size the face may, when it meets with slight resistance from the perinæum, be born in any of the pelvic diameters. Instances of spontaneous delivery without anterior rotation of the chin are, however, extremely rare. He then proceeds to give his opinion as being

that "at full term the face presenting spontaneous delivery in mento-posterior position is not practicable." He adds that "it is claimed, however, that when the head is small and compressible it may stretch either the sacro-sciatic ligaments when oblique, or the perinæum, after passing the extremity of the sacrum to an extent sufficient to permit the descent of the occiput beneath the pubic arch, and the conversion of the face into a vertex presentation." He also adds that "Smellie, Hicks and Braun, of Vienna, have, however, each reported a case of forceps delivery by drawing the chin down over the sacrum and perinæum, when the occiput and calvarium glided underneath the pubes." He also mentions two similar cases reported by Dr. I. E. Taylor.

Playfair notices the subject in the following words: "In order fully to understand the subject, it is necessary to study those rare cases in which the chin points backwards, and forward rotation does not occur. These may be taken to correspond with the occiput posterior position, in which the face is born looking to the pubes, but, unlike them, it is only very exceptional that delivery can be naturally completed. The reason of this is obvious, for the occiput gets jammed behind the pubes, and there is no space for the fronto-mental diameter to pass the anterior-posterior diameter of the outlet. Cases are indeed recorded in which delivery has been effected with the chin looking posteriorly, but there is every reason to believe that this can only happen when the head is either unusually small or the pelvis unusually large. In such cases the forehead is pressed down until a portion appears at the ostium vagina, when it becomes firmly fixed behind the pubes, and the chin, after many efforts, slips over the perinæum. When this is effected, flexion occurs, and the occiput is expelled without difficulty. The forehead is probably always on a lower level than the chin. Dr. Hicks has published a paper in which he attempts to show that this termination of face presentation is not so rare as is generally supposed, and he gives a single instance in which he effected delivery with the forceps, but he practically admits that special conditions are

necessary, such as the antero-posterior diameter of the outlet particularly ample, and a diminished size of the head. When delivery is effected it is probable, as Cazeaux has pointed out, that the face lies in the oblique diameter of the outlet, and that the chin depresses the soft structures at the side of the sacro-sciatic notch, which yield to the extent of a quarter inch or more, and thereby permits the passage of the occipito-mental diameter of the head. It must, however, be borne well in mind that spontaneous delivery in mento-posterior position is the rare exception, and that supposing rotation does not occur—and it often does so at the last moments—artificial aid, in one form or another, will be almost certainly required."

This article, having already attained considerable length, the similar notices of Bedford, Glisam, Leishman and others, which we have taken time to look up, are omitted. Sufficient have been quoted to prove that while the cases are extremely rare, they serve, like so many others in medicine, to show that there is hardly a rule without its exceptions.

Since writing the above we learn that Dr. Hauenstein, of this city, delivered with forceps in a case of face presentation, mento-posterior position. This occurred some twenty years ago.

EDITORIAL NOTES.

Dr. LEIDY, of Philadelphia, says: "I have used Churchill's preparation, as made by J. A. McArthur, with the most decided benefit, and am satisfied that a fair trial is all that is required to establish its therapeutic value. I have at this writing several cases in which the syrup is doing beyond my expectations."

WE have received from the old Travelers' Insurance Company, of Hartford, a copy of the official engraving of the Bartholdi Statue to be placed in New York harbor. It is the only correct picture of that noble gift, and faithfully represents to the eye the enormous statue, completed and in the midst of its magnificent surroundings.

EMERGENCY hospitals have proved themselves to be a great public benefit. We learn that the authorities of the Sisters' Hospital have purchased the property corner of Michigan and S. Division

streets, and propose to erect thereon a commodious and well-appointed building. It would be difficult to find a more desirable location for the hospital than the one selected.

HOSPITAL APPOINTMENTS.—Drs. Davidson, Stockton and Fell have been appointed to serve on the medical staff of the Buffalo Hospital of the Sisters of Charity, and the Emergency Hospital. Drs. H. R. Hopkins and Herman Mynter have accepted positions upon the attending staff of the Buffalo General Hospital. These appointments will meet with general commendation.

THE druggists' war still rages. The cutting of prices seems to be confined to patent medicines and fancy goods. As long as the knights of the pestle do not attempt to make up for their losses on these nostrums by charging our patients more for legitimate drugs and prescriptions, the physician will remain an amused looker-on. We are informed that the sale of patent medicines has largely increased. If this is so, the spectacle of a gullible public purchasing and swallowing more worthless and injurious medicine, because it can be bought at a reduced price, is indeed amusing. There is, however, another and a sad side to it. How much money is wasted and how many lives are lost by a foolish dependence, in the beginning of disease, upon these lying nostrums.

Reviews.

Thirteenth Annual Report of the Managers of the Buffalo State Asylum for the Insane, Transmitted to the Legislature Jan. 15. 1884.

The following is from the report of the Superintendent, Dr. Judson B. Andrews:

There was a history of syphilis in fourteen cases, while it was stated as the direct cause of insanity in three cases.

Two hundred and fifty-nine cases were admitted to the asylum for the first time, and only six for the second time. In two hundred and thirty-six cases the present was the first attack; in twenty-two, it was the second; in five, the third; in one, the fourth, and in one the number could not be ascertained.

As regards the physical condition of those admitted, four had hemiplegia, one had chorea, and twenty-two were sick and very feeble. Three had cut throat, one a wound in the breast, one

was deaf and dumb, one blind in both eyes, and three in one eye. Two were deaf and one was an idiot. Two were pregnant. Thirteen were debilitated by intemperate habits, and five by vicious habits and indulgences.

Of the two hundred and sixty-five admissions, four were received from other asylums, the rest came directly from their homes or from the counties chargeable with their support.

Fourteen were cases of epilepsy, and eighteen of paresis. Forty had been insane for two or more years, and in twenty-five cases the duration of insanity, though chronic, was unascertained. This makes the prospect for recovery unfavorable in thirty-seven per cent. of the admissions.

We republish in the JOURNAL the following tables, taken from the report of the superintendent, as particularly interesting to physicians :

TABLE NO. 1.

General statistics of the asylum.

	Men.	Women.	Total.
Patients in the asylum Sept. 30, 1882.....	146	128	274
Admitted during the year.....	139	126	265
Total in the asylum..	285	254	539
Discharged recovered.....	35	30	65
much improved.....	9	7	16
improved.....	23	14	37
unimproved.....	20	21	41
died.....	33	12	45
not insane.....	6	..	6
Total.....	126	84	210
Remaining in the asylum Sept. 30, 1883.....	159	170	329
Maximum number within the year.....			339
Minimum.....			269
Daily average.....			301 $\frac{1}{2}$
Ratio of recoveries to number of admissions.....			24.5
Ratio of recoveries to average population.....			21.6
Ratio of recoveries to number discharged.....			31

TABLE NO. 2.

Received on first or subsequent admissions.

No. of admission.	Men.	Women.	Total.
First	137	122	259
Second	2	4	6
Total cases.....	139	126	265

TABLE. NO. 3.

Showing the number of attacks in two hundred and sixty-five cases.

	Men.	Women.	Total.
First attack	125	111	236
Second attack	10	12	22
Third attack	3	2	5
Fourth attack	1	...	1
Several attacks	...	1	1
	139	126	265

TABLE NO. 4.

Annual admissions, discharges and deaths.

	Admitted.			Disch'ged. Recover'd.			Much improved.			Im- proved.			Unim- proved.			Died.			Not insane.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1881 ..	122	97	219	13	6	19	4	3	7	2	2	4	6	4	10	14	8	22	1	..	1
1882 ..	157	116	273	30	25	55	9	6	15	11	2	13	28	20	48	10	6	16	5	3	8
1883 ..	139	126	265	35	30	65	9	7	16	23	14	37	20	21	41	33	12	45	6	..	6
Total ..	418	339	757	78	61	139	22	16	38	36	18	54	54	45	99	57	26	83	12	3	15

TABLE NO. 5.

General statistics of the asylum from its opening.

Total number of admissions	757
Total number discharged recovered	139
Total number discharged much improved	38
Total number improved	54
Total number unimproved	99
Total number died	83
Total number not insane	15
Total number	428
Remaining September 30, 1883	329

TABLE NO. 6.

Form of insanity in two hundred and sixty-five cases admitted.

	Men.	Women.	Total.
Acute mania	37	47	84
Melancholia	33	30	63
Dementia	32	20	52
Chronic mania	4	8	12
Sub-acute mania	4	3	7
Paroxysmal mania	2	4	6
Epilepsy with mania	1	3	4
Epilepsy with dementia	6	4	10
Paresis	14	4	18
Not insane	6	3	9
Total	139	126	265

TABLE NO. 7.

Assigned causes in two hundred and sixty-five cases admitted.

	Men.	Women.	Total.
Ill-health from grief and anxiety, overwork or loss of sleep.....	25	23	48
General ill-health.....	13	26	39
Ill-health from want.....	2	1	3
Ill-health from fright.....	1	2	3
Puerperal.....	..	8	8
Change of life.....	..	3	3
Menstrual irregularities.....	..	5	5
Prolonged lactation.....	..	2	2
Abortion.....	..	2	2
Uterine disease.....	..	1	1
Fevers—malarial, typhoid and scarlet.....	2	2	4
Intemperance.....	9	4	13
Masturbation.....	2	..	2
Syphilis.....	2	1	3
Vicious habits and indulgences.....	5	..	5
Opium habit.....	..	2	2
Bright's disease.....	..	1	1
Meningitis.....	3	..	3
Sunstroke.....	2	..	2
Rheumatism.....	1	..	1
Phthisis.....	1	..	1
Injury to head.....	6	1	7
Apoplexy.....	5	1	6
Locomotor ataxia.....	1	..	1
Senility.....	2	..	2
Epilepsy.....	9	6	15
Paresis.....	14	4	18
Not insane.....	6	3	9
Unascertained.....	28	28	56
Total.....	139	612	265

TABLE NO. 10.

Of hereditary transmission in two hundred and sixty-five cases admitted.

	Men.	Women.	Total.
Maternal branch.....	6	16	22
Paternal branch.....	6	6	12
Paternal and maternal branches.....	5	..	5
Insane relations.....	13	11	24
Total.....	30	33	63

TABLE NO. 12.

Ages of two hundred and sixty-five cases admitted.

	Men.	Women.	Total.
From 10 to 15 years.....	2	1	3
15 to 20 years.....	14	9	23
20 to 25 years.....	16	13	29
25 to 30 years.....	13	13	26
30 to 35 years.....	18	21	39
35 to 40 years.....	15	17	32
40 to 50 years.....	27	26	53
50 to 60 years.....	20	18	38
60 to 70 years.....	7	8	15
70 to 80 years.....	5	..	5
80 to 90 years.....	2	..	2
Total.....	139	126	265

TABLE NO. 16.
Ages of sixty-five cases recovered.

	Men.	Women.	Total.
From 15 to 20.....	5	2	7
20 to 25.....	5	3	8
25 to 30.....	5	6	11
30 to 35.....	6	7	13
35 to 40.....	1	6	7
40 to 50.....	9	4	13
50 to 60.....	3	2	5
60 to 70.....	1	..	1
Total.....	35	30	65

TABLE NO. 17.
Form of insanity in sixty-five cases recovered.

	Men.	Women.	Total.
Acute mania.....	17	19	36
Melancholia.....	11	6	17
Sub-acute mania.....	2	1	3
Chronic mania.....	1	1	2
Paroxysmal mania.....	1	..	1
Dementia.....	3	2	5
Epilepsy with mania.....	..	1	1
Total.....	35	30	65

TABLE NO. 18.
Causes of death in forty-five cases.

	Men.	Women.	Total.
Paresis.....	16	1	17
Heart disease.....	2	1	3
Exhaustion.....	2	1	3
Chronic diarrhœa.....	2	1	3
Apoplexy.....	3	1	4
Cerebral hemorrhage.....	3	1	4
Erysipelas.....	..	1	1
Epilepsy.....	..	1	1
Chronic bronchitis.....	1	..	1
Bright's disease.....	..	1	1
Strangulation.....	1	..	1
Suspension.....	1	..	1
Pneumonia.....	1	1	2
Cancer of uterus.....	..	1	1
Hemorrhage of the lungs from gangrene.....	1	..	1
Pyæmia.....	..	1	1
Total.....	33	12	45

TABLE NO. 19.
Ages of the forty-five who died.

	Men.	Women.	Total.
From 15 to 20 years.....	..	1	1
20 to 25 years.....	..	1	1
25 to 30 years.....	..	2	2
30 to 40 years.....	3	1	4
40 to 50 years.....	12	3	15

	Men.	Women	Total
50 to 60 years.....	5	2	7
60 to 70 years	7	2	9
70 to 80 years.....	4	..	4
80 to 90 years.....	2	..	2
Total.....	33	12	45

TABLE NO. 20.

Form of insanity in forty-five cases of death.

	Men.	Women.	Total.
Acute mania.....	3	1	4
Melancholia	5	4	9
Chronic mania.....	1	2	3
Dementia	7	3	10
Epilepsy with dementia.	1	1	2
Paresis.....	16	1	17
Total.....	33	12	45

TABLE NO. 21.

Conditions associated with eighteen cases of paresis admitted during the year.

	Men.	Women.	Total.
Syphilis.....	4	..	4
Intemperance	1	..	1
Syphilis and intemperance.....	1	..	1
Uncomplicated or unknown.....	8	4	12
Total.....	14	4	18

The report of the superintendent is one of unusual interest and includes remarks on the following topics: Asylum building, water supply, service department, how organized, etc. The first subject is the kitchen, with a dietary arranged for the week, then the laundry, engine houses, shops, etc., the farm officers of asylum, including night watcher and other attendants, with an ingenious blank for keeping the nightly record, school, medical care and supervision, visits to and reception of patients, labor accomplished and amusement furnished. We learn also from another source that Drs. Granger and Crego, the assistants to the superintendent, have instituted a training school for nurses more particularly devoted to instruction in the care of the insane.

A Treatise on Pharmacy, designed as a text-book for students and as a guide for the Physician and Pharmacist, containing the official and many unofficial formulas. By EDWARD PARISH, late Professor of Pharmacy in the Philadelphia College of Pharmacy. Fifth edition, enlarged and thoroughly revised by THOS. S. WIGAND, Ph. D., with 256 illustrations. Philadelphia: H. C. Lea's Son & Co. 1884.

It is only necessary to announce the appearance of a fifth edition of this standard work. In its special field it stands unequalled in any language. Every pharmacist of any education

is familiar with it, and we would heartily commend it to every physician who is obliged to compound his own medicine. The book is presented in exceedingly handsome style by the publishers.

The Field of Disease: A book of Preventive Medicine. By B. W. RICHARDSON, M. D., LL. D., F. R. S., Fellow of the Royal College of Physicians, etc. Philadelphia: H. C. Lea's Son & Co. 1884.

The immense strides taken by medical science during the last quarter of a century have had no more conspicuous field of progress than the causation of disease. Not only has this led to marked advance in therapeutics, but it has given rise to a virtually new department of medicine—more important, perhaps, in its ultimate results than even the investigation of curative processes. Yet thus far there has been no attempt to gather into a systematic and intelligible shape the accumulation of knowledge acquired on this most interesting subject. Fortunately, the task has been at last undertaken by a writer who, of all, is perhaps best qualified for its performance, and the result of his labors can hardly fail to mark an epoch in the history of medical science.

The author states that he has written the book for those members of the intelligent reading public who, without desiring to touch the province of the physician and surgeon, wish to know the leading facts about the diseases of the human family, their causes and prevention. He has accomplished his purpose, for the work is written in a style and with a freedom from technicalities which makes it intelligible and interesting to the general reader. But while it is intended primarily for the public, we would also commend it very heartily to the profession; it contains much valuable information to the physician which it is difficult to find elsewhere and is worthy a place in every doctor's library.

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Original Communications.

NIAGARA UNIVERSITY.

THE LEGALITY OF THE CHARTER GRANTED BY THE REGENTS OF
THE UNIVERSITY OF THE STATE OF NEW YORK, IN RELATION
TO THE MEDICAL DEPARTMENT, AFFIRMED BY SPRAGUE,
MOREY & SPRAGUE, ATTORNEYS, BUFFALO.

The question submitted is, has the Niagara University the power and authority to confer the degree of Doctor of Medicine upon the graduates from the Medical Department, which degree shall authorize such graduates to practice physic and surgery? By chapter 190 of the laws of 1863, Steven V. Ryan and others, and their successors, were constituted a body corporate by the name of the Seminary of Our Lady of Angels, the object of the said institution being declared by the first section of the act to be "to establish and maintain a seminary of learning in the county of Niagara, for the care and education of young men." Section 6 of this act reads as follows: "Whenever, in the opinion of the regents of the university, the state of literature of the said seminary and the value of its property (according to the regulations of the said regents) shall justify the same, the

said regents may, on the petition of the trustees, by an instrument under their common seal, erect the said seminary into a college, with such name and such number of trustees, and on such conditions, and with such powers and privileges, conformable to law, as the said regents may deem proper." By an act passed March 12, 1883, entitled, "An act to amend chapter 190 of the laws of 1863, entitled 'An act to incorporate the Seminary of our Lady of Angels,'" the above-quoted 6th section was amended by adding at the end thereof the following words: "And the said college shall have the right to maintain any department of learning that is maintained by any college or university in this State, and may locate and maintain any department thereof in the county of Erie."

Pursuant to section 6, as so amended, the regents of the university on August 7, 1883, upon the petition of the trustees of the Seminary of Our Lady of Angels, issued their certificate or charter under their seal, erecting the said seminary into a college, as authorized by chapter 92 of the laws of 1883, under the name of Niagara University.

First. We are of the opinion that the provisions of section 6, amended as above by the act passed March 12, 1883, are broad enough to authorize the Niagara University to maintain a medical school or college, and to provide a faculty and to give medical instruction to students. There cannot be any doubt that the words "any department of learning," include in their meaning a department giving instruction in medicine; nor does there appear to be any doubt that on March 12, 1883, medical schools or departments were being maintained by colleges and universities in this State.

Second. We are of the opinion that the last clause in the amendment to section 6 authorizes the trustees of the Niagara University to locate and maintain such medical school as a department of said university in the county of Erie.

This would have been unlawful prior to the said act of 1883, under the provisions of section 21 of part 1st, chapter 14, title 7

of the Revised Statutes, which reads as follows: "Nor shall any college have or institute a medical faculty to teach the science of medicine in any other place than where the charter located the college."

The plain meaning and effect of the amendment of 1883, to section 6, is to except the college or university to be erected under that act from this provision. It cannot be construed to have any other meaning or application, and being the latest expression of the legislative will, it must control.

Third. The most important and difficult question yet remains to be answered. Has the Niagara University been authorized by law to grant and confer upon its graduates the degree of Doctor of Medicine, with the right to practice physic and surgery, by virtue of having received such degree?

By chapter 275 of the laws of 1844, all the legal prohibitions and penalties which had theretofore existed against the practice of physic and surgery by unlicensed persons were swept away, and no general enactment was thereafter adopted by the legislature upon that subject until May 9, 1880. By chapter 513 of the laws of 1880, it was provided as follows:

Section 1. "A person shall not practice physic and surgery within the State, unless he is twenty-one years of age, and either has been heretofore authorized so to do pursuant to the laws in force at the time of his authorization, or is hereafter authorized so to do, as prescribed by chapter 746 of the laws of 1872, or by subsequent section of this act."

Sec. 2 provides for the registration in the office of the County Clerk of every person then lawfully engaged in the practice of physic or surgery within the State, and of every person who should thereafter be duly authorized to practice physic and surgery.

Sec. 3 provides penalties for the violation of either of the two preceding sections.

Sec. 5 provides as follows: "The degree of Doctor of Medicine lawfully conferred by any incorporated medical college or

university in this State, shall be a license to practice physic and surgery within the State after the person to whom it is granted shall have complied with section 2 of this act."

Chapter 740 of the laws of 1876, referred to in the first section of this act, provided for the appointment by the regents of the University of the State of New York of one or more boards of examiners in medicine, and required such examiners to faithfully examine the candidates referred to them for that purpose by the chancellor of said university, and furnish a detailed report in writing.

Section 6 of such act of 1872 reads as follows: "The regents of the university, on receiving the aforesaid reports of the examiners, and on finding that not less than five members of the board have voted in favor of a candidate, shall issue to him or her a diploma, conferring the degree of Doctor of Medicine of the University of the State of New York, which degree shall be a license to practice physic and surgery."

So that since the act of May 29, 1880, there are only two sources from which a person not then authorized to practice physic and surgery may obtain such authority: First, by submitting to an examination of a board of examiners appointed by the regents, and obtaining thereupon from the regents a diploma conferring the degree of Doctor of Medicine of the University of the State of New York. Or, second, by receiving the degree of Doctor of Medicine lawfully conferred by any incorporated medical college or university in this State.

Has the Niagara University the authority of law to confer such degree?

I. The provisions of section 6 of the act under which the university is incorporated, as amended by the act of 1883, do not expressly and, in terms give this power. The words used are "and the said college shall have the right to maintain any department of learning that is maintained by any college or university in this State."

II. Section 6, of the act of 1883, provides that "the said regents may, on petition of the trustees, by an instrument under their common seal, erect the said seminary into a college with such name, and with such number of trustees, and on such conditions and with such powers and provisions conformable to law as the said regents may deem proper." The same power had been given to the regents in respect to academies generally by section 17 of chapter 59 of the laws of 1813, entitled "An act relative to the university." The words "with such powers and provisions conformable to law as the said regents may deem proper," obviously referred to the powers which had previously been conferred upon the regents in like cases. In the exercise of the power thus vested in them, the regents, in the charter granted by them to the Niagara University, declare that "in pursuance of the authority in us by law vested, do grant, ordain and declare that the said Seminary of Our Lady of Angels shall be, and is hereby erected into a college by the name hereinbefore mentioned for the instruction of youth in the learned languages, and in the liberal and useful arts and sciences." The charter then, after naming the incorporators, declares "that they and their successors shall be a body incorporate by the name of the Niagara University, and shall have, possess and enjoy all the powers and privileges, and be subject to such limitations and restrictions in all respects as are now or may be hereafter prescribed by the statutes of this State in regard to colleges, or by the ordinances or regulations of us, the said regents, in conformity to law."

It appears, therefore, that the Niagara University under this charter rightfully possesses all the powers and privileges which are possessed by any college in the State of New York.

The enquiry then is, have the colleges of this State the power and authority to grant the degree of Doctor of Medicine to their graduates? Chapter 59 of the laws of 1813, entitled "An act relative to the university," provides for the founding of colleges by the regents of the university; and in section 6, after

providing for their incorporation, declares that such colleges shall have perpetual succession and enjoy all the corporate rights and privileges enjoyed by Columbia College in and by the act entitled, "An act to institute a university within this State," and for other purposes therein mentioned, passed April 13, 1787. On reference to this later act of 1787, it will be found that in section 10, in defining the power, authority, rights, privileges, franchises and immunities of Columbia College, provides that it shall be the same as those granted to the governors of the college of the Province of New York, in the State of New York, in America, by its charter of Oct. 31, 1754.

The powers granted by the charter of October 31, 1754, are in the following words: "And we do further of our especial grace, certain knowledge, and mere motion, will, give, and grant unto the said governors of the said college that, for the encouragement of the students of the said college to diligence and industry in their studies, they and their successors, and the major part of any fifteen or more of them convened and met together as aforesaid, do, by the president of the said college, give and grant any such degree and degrees to any of the students of the said college, or any other person or persons by them thought worthy thereof, as are usually granted by any or either of our universities or colleges in that part of our kingdom of Great Britain called England, and that the president, or such other persons to be appointed for that purpose as aforesaid, do sign and seal diplomas or certificates of such degree or degrees to be kept by the graduates as a testimonial thereof."

And by the provisions of section 6 of chapter 59 of the laws of 1813, these words above quoted define also the powers which were conferred upon Niagara University by the charter issued to them by the regents of the university.

The question, then, of the power of Niagara University to confer the degree of Doctor of Medicine, will be answered by ascertaining whether Columbia College enjoyed the right and privilege of conferring that degree under its charter of April 13,

1787. The power conferred by that charter by its reference to the charter of October 31, 1754, is in these words: "Give and grant any such degree and degrees to any of the students of said college, or any other person or persons by them thought worthy thereof, as are usually granted by any or either of our universities or colleges in that part of our kingdom of Great Britain called England."

It would probably be quite safe to rest upon the reasonable presumption that there was, in the year 1754, some university, or some college in England which granted the degree of Doctor of Medicine. The language quoted is, "Any or either of our universities or colleges;" so that if there was one such university or college in Great Britain having the power to grant the degree of Doctor of Medicine, then that power was conferred upon Columbia College by its charter of 1787. But we are not compelled to rest upon this presumption, though it appears to be a reasonable and safe one. The corporation named, the trustees of Columbia College was originally incorporated under the name of the governors of the colleges of the province of New York. The corporate name was changed to the trustees of Columbia College by section 8 of the law of April 13, 1787.

In a "historical sketch of Columbia College" in a book entitled "Statutes of Columbia College and its Associate Schools," printed for the college in 1880, this statement appears: "In August of the year 1767 a medical school was established." The same historical sketch quotes from an account of the institution supposed to be written by Dr. Cooper, its last president before the Revolutionary War, in the following words: "This seminary hath also produced a number of gentlemen who do honor to their professions, the place of their education and themselves, in divinity, law, medicine, etc., etc., in these and various other colonies." And the catalogue of Columbia College from 1754 to 1882, printed for the college in 1882, shows that from 1769 to 1810 various persons graduated from the medical department of Columbia College. This shows that it

was the understanding of the trustees and faculty of the college department that under its charter of 1754, above quoted, it had the right to issue diplomas to persons graduating from its medical department.

III. The right and power to grant honors and degrees thus conferred upon all colleges chartered by the regents of the University is supplemented and strengthened by the provisions of the Revised Statutes; being article 2, of title 1, of chapter 15, of part 1st, entitled, "Of the powers and duties of the trustees of colleges."

Section 37 provides as follows: "Every diploma granted by such trustees shall entitle the possessor to all the immunities which by usage or statute are allowed to possessors of similar diplomas granted by any university, college, or seminary of learning in the United States."

It already appears that long before the adoption of the Revised Statutes, persons who had graduated from the medical department of Columbia College had attained distinction in the practice of medicine in New York and other colonies, and that "usage" had thus been established.

IV. This view of the proper construction of the statutes is also strongly confirmed by the fact that our statutes seem to have assumed that every lawfully incorporated college or university has the power to grant such honors and degrees. For example section 7 of chapter 59 of the laws of 1813, hereinbefore referred to, provides: "And be it further enacted that the said regents shall have the right of conferring by diplomas under their common seal on any person or persons whom they may think worthy thereof, all such degrees above or beyond those of Bachelor or Master of Arts, as are known to or granted by any university or college in Europe; and the degree of Doctor of Medicine granted by the said regents shall authorize the person on whom it is conferred to practice physic and surgery in this State, any law to the contrary notwithstanding."

This provision assumes as a fact that the degree of Doctor of Medicine is included in "such degrees as are known to and usually granted by any university or college in Europe." So in chapter 14 of part 1st of the Revised Statutes, section 21, title 7, provides as follows: "The degree of Doctor of Medicine conferred by any college in this State shall not be a license to practice physic or surgery." So this power to grant diplomas conferring the degree of Doctor of Medicine seems to have been assumed in chapter 45 of the laws of 1835, relating to Geneva College, and in chapter 25 of the laws of 1837, relating to the University of the City of New York. So, too, section 1st of chapter 436 of laws of 1874 provides that "every practitioner of medicine or surgery in this State, excepting licentiates or graduates of some medical society or chartered school, shall be required, and they are hereby commanded to obtain a certificate," etc.

Section 3 declares, "It is hereby declared a misdemeanor for any person to practice medicine or surgery in this State unless authorized so to do by license or diploma from some chartered school, State Board of Medical Examiners, or medical society, or who shall practice under cover of medical diploma illegally obtained." These sections seem to assume the right of a chartered school to grant a diploma which should afford evidence of the qualification of the person holding it to practice medicine. The same assumption runs through the provisions of chapter 513 of the laws of 1880, heretofore referred to.

V. The only reported case in this State which appears to have any bearing upon the question under consideration is that of *The People vs. The Trustees of Geneva College*, 5 Wendell reports, 211. The trustees of Geneva College—an incorporated college—located in Geneva, Ontario county, established a medical faculty in the City of New York, called the "Rutgers Medical Faculty of Geneva College," and claimed the right of issuing diplomas conferring the degree of Doctor of Medicine upon the graduates therefrom. This was an action in the nature of a *quo*

warranto, to test the power of Geneva College to exercise its corporate rights and franchises in this manner at the city of New York. The case was argued by Green C. Brownson and Jay for the people, and by Emmett and Ogden for the trustees. Chief Justice Savage, in delivering the opinion of the court, says: "The defendants are a corporation for the purpose of instructing pupils in the arts and sciences; they have power to confer degrees which are evidence of the proficiency made by their pupils; they have power, of course, to appoint tutors and professors to teach those branches of learning which will qualify pupils for receiving diplomas; these are franchises and cannot be exercised by a corporation without legislative authority; it is not denied that an individual may instruct pupils and may employ teachers under him, and may call them professors, and may also give a certificate or diploma; but a diploma or degree of Doctor of Medicine from an individual will not give its possessor a right to practice in this State as a physician; *a diploma or a degree from a college does give that right.* The individual who confers a degree does not profess to act by legislative authority; the corporation does. The degree of the individual confers no privilege or immunity upon the pupils; the degree of the corporation does confer a privilege; hence, the same act when done by an individual may be no franchise, yet is such when done by a corporation." To sum up we say, then:

I. That Niagara University is endowed by the law incorporating it, and by its charter, with all and any of the powers and privileges which belong to any legally incorporated college or university in the State of New York.

II. That the statute authorizing the regents of the university to incorporate colleges, and the Revised Statutes as well, confer upon the colleges of the State of New York the power to grant diplomas, which shall confer the degree of Doctor of Medicine.

III. The statute of the State from the time of the act incorporating the regents of the university down to 1880, have uni-

formly assumed that this power existed in the colleges of the State.

IV. In the only reported case bearing upon the question, Emmett, counsel, assumed, and the court decided that this power exists. There does not, therefore, appear to be any reasonable doubt that Niagara University has the power to grant diplomas conferring the degree of Doctor of Medicine; the right of a person who has received such a degree to practice physic and surgery is given by chapter 513 of the laws of 1880.

Dated Oct. 1, 1883.

AN EXPERIENCE WITH CANNABIS INDICA.

BY FRANK DUDLEY BEANE, A. M., M. D., OF NEW YORK CITY.

Having suffered from general neurasthenia for a couple of weeks, and annoyed by pain for which I did not care to take opium or morphia, I took, about 9.45 A. M. of March 5th, just seven and a half ($7\frac{1}{2}$) minims of "normal liquid" cannabis indica and twenty-two and one-half ($22\frac{1}{2}$) minims of "normal liquid" ergot, samples of which had recently been received from the manufacturers, Messrs. Parke, Davis & Co.

About 10.15 A. M., while sitting in my office, I felt a momentary dizziness pass over me, accompanied by a peculiar *lightness* of the whole body. The sensations were repeated. I laid down the medical journal I was reading, arose from my chair, but again came the phenomena, with increased power. I walked up and down the room, experiencing an indefinable nervous depression in addition to the sensations before alluded to. Stamping my foot, I chided myself for allowing this "nervousness" to master my attention. The dizziness increased. I threw myself upon the sofa, thinking to dissipate these feelings by a better supply of blood to the brain. I had before experienced slight vertiginous attacks after prolonged mental work, and was not alarmed. On assuming recumbency the symptoms at once increased, immediately followed by a peculiar and indescribable dread, and general muscular weakness.

Satisfied that I was to experience the peculiar physiological effects of Indian hemp (a vivid description of which I had years ago read, in Dr. H. C. Wood's "Materia Medica," I think), combined with those of ergot, I descended to the dining-room, swallowed half of a wineglassful of port wine, but could not the balance, inasmuch as I felt I had only strength sufficient 'o climb to the second story, where my wife was. Ascending the two flights of stairs with the greatest difficulty, on account of the lead-like heaviness in my legs, it seemed as though at the next step should fall backward. On entering the room I informed my wife what was to be expected; I was walking about in an aimless, half-dazed way, when she led me to the bed, whereon I threw myself, removing the pillow from under my head. Gradually increasing darkness came on, accompanied by a swimming of my head, a sinking feeling at the præcordial region, a sensation of spasmodic, powerful contractions of all the blood vessels of the body, even of the smallest twigs, and a horrible feeling of impending death. I directed my wife to give me raw brandy, and send for my bottle of liq. atropiæ (Lond.) my object being to antagonize the arterial contraction. Immediately I began moving the right leg up and down, rubbing the foot against the bed-clothes very rapidly (my wife informs me I also slapped the bed with my right arm, for a few moments, but I recollect it not), as the motion seemed to be a relief, in partly distracting my attention from the increasing muscular heaviness, rapid action of the heart, and cold waves, which were passing rapidly and in quick succession over my whole body. The motion was wholly voluntary, as, on the entrance of Dr. Davis, I discontinued it long enough to demonstrate it was under control. I explained to him the state of affairs, advised the giving of atropia as an arterial dilator, and was given brandy and ℞ ij of the solution above-mentioned at his hands. While he was dropping the above my eyelids closed involuntarily, but I did not, even for an instant, lose consciousness. The lids seemed simply to close over the eyes, and I had neither inclina-

tion nor power to open them. Next, my breathing became *to me* laborious, as though a great weight were upon my chest interfering with its expansion, as well as an impediment rising from under the sternum toward the larynx.

I should here state that up to just before the arrival of the doctor I had been feeling my pulse, which became so quick and feeble I desisted from further interrogation; being sensible, the knowledge of a failing heart would add nothing to my power of resistance.

Simultaneous with the oppressed breathing (which, by the way, Dr. Davis said became very shallow for a while, requiring his admonition to "breathe more deeply," with which instruction I complied and remember), appeared most intense, and awful coldness in the præcordial region, which seemed actually unbearable the instant preceding the application of (almost) scalding hot water, also applied to my forehead and feet, affording, as it then seemed to me, the greatest relief ever experienced by a suffering mortal!

Suddenly a shock, as it may be best expressed, of motor and sensory paralysis passed through my frame; then I was instantaneously introduced to the next stage. How shall I describe it? To say that like an electric flash an unconsciousness passed over my brain, and that cerebration was instantly awakened to three sensations—one, that I was speeding along like the wind in the utter darkness of a broad, interminable tunnel; another, that my body lay cold in death (upon the bed) at which I was gazing as from some spot in the vale of darkness, while I speculated upon the appearance my corpse presented; the third, a consciousness of what my wife and the doctor were saying. To describe all this but feebly expresses the wonderful triple sensation.

Despite the lightning-like rapidity of these occurrences, my mind had time to soliloquize: "If this be death, 'tis not only devoid of horror and fear, but brings such calm and ease as alone could be vouchsafed mortal by the All-Wise."

The pitch-like darkness gave way to a phosphorescent light, quickly succeeded by the most beautiful and soft lilac shade of misty brightness, lasting sufficiently long for me to exclaim: "Oh! what a beautiful purplish hue!"

Succeeding this came a genuine state of trance, which lasted till 4.30 P. M.

My body seemed to be fashioned from wood. My neck and head were hewn from hickory; my chest and abdomen, of huge proportions, were also wooden, and from my hips my limbs were represented by a log of wood extending an interminable distance along a pathway through woods, the green-leaved trees rising up on either side, and, far above, the clear, blue, beautiful, half-sunny sky seemed to look with benignant glance upon the strange object stretched upon the ground. How queer my carved-from-wood face appeared to my other self, which never for an instant failed to recognize the dual existence, to realize what was transpiring about me in the room, hall, or even the hall below stairs. How extremely funny appeared to my *alter ego* my chest and abdomen, forming a huge barrel! So excruciatingly ludicrous it seemed that, lifting my arm, and crying out: "See how hollow this barrel-stomach of mine is!" I struck out with such force as to make the result anything but agreeable to the part attacked. No sooner had the hand touched my body than the barrel hallucination disappeared; on removing the hand it reappeared. And my arms, how short they seemed, and how immense my hands! The arms seemed thrust out from and attached to openings in the upper part and sides of the barrel, and felt to be no longer than five inches, or half the length of my forearms. The hands seemed like huge boxing gloves!

Henceforward, till I awoke at 4.30 P. M., I remained in a state of the most hilarious exhalation and constant volubility. I was contented and happy beyond description, only wishing for indefinite prolongation of this state. My tongue ran upon much nonsense and every imaginable topic. I asked many questions

pertinent to happenings of the past and present, and connected with expected events. Then, again, I would laugh immoderately at some remark (possibly far from mirth-provoking) of the bystanders, or at my own imaginings. (My wife says I cried most piteously for awhile over a matter of the past, present, and future which greatly concerns me, but I do not recollect.) I was ever conscious of all my foolishness, but had no *will-power* to exert control. My hearing reached the highest pitch of acuteness; it could locate the slightest noise even in the lower halls; it caused me to *feel* the presence of members of my family in whatever part of the room or hall they might be. On the entrance of any one my eyelids would fly open, I would raise myself up in bed, and, staring, point my finger as I pronounced the correct name, then fall (or be pushed) back upon the bed, my eyelids closing, and the woody phantasm reappear. Each time (four) I thus opened my eyes all the surroundings appeared natural, even to the snow falling outside, seen through the window, only that I was looking, as it were, through a veil of brilliant ether, for I can in no other words adequately express the appearance. Among others, I had the notion that the extremities of my body were attached to pivots, and that (making the movements with my body sideways) I was swinging to and fro like a baby's cradle. At the same time I realized this was indeed an hallucination.

The atropia I had taken caused such dryness of the fauces, water was given me, and felt as though poured into a long wooden tube, resounding as it touched bottom, instead of into my mouth and throat. The opening of my lips seemed like separating two large blocks of wood (or cork), so immense the labia appeared to be. At 4.30 P. M. I emerged from this state exclaiming: "Why, here I am once more, and everything just as natural as ever. What time is it?" When told, I wondered whence had passed so much time, so short a period it seemed since I went to bed, certainly not more than a quarter of an hour. I was much exhausted, and soon inclined to drowsiness, which I

resisted. *Intense hunger* appeared, but I ate little or nothing. Slept well. Attended to practice the next day, though feeling quite weak and slightly dizzy. On walking the streets, distant objects appeared to be very near, and I imagined myself to be very tall. Both notions disappeared in less than an hour.

Finally, I remember of vomiting once (only) during the reactive (trance) stage, also of relieving my bladder of a goodly quantity of rather light-colored urine. No aphrodisiac effect accompanied or followed the phenomena. In addition to the subjective, above described, the objective symptoms, observed by my wife, were, during the stage of depression, icy coldness of the face, head, chest, upper and lower extremities, blueness of the hands, face of marble-like pallor, under lids puffed in the centre like a ridge (spasm of the orbicularis), pupils widely dilated, eyeballs bloodshot, wild look, no convulsions, general or local. Doctor Davis reported that my pulse at one time could scarcely be detected at the wrist, so feeble and rapid it had become.

Remarks—I wish briefly to draw attention to the following points:

1. In practice I have given as many as gtt. xx, and in one case reached gtt. xxxv, at one dose, repeated several times a day for several days, of the fluid extract of cannabis indica, with the best effect upon pelvic pain, and no other disagreeable symptom than slight stiffness of the jaw. I know not the make, but certainly it was not that of Parke, Davis & Co.; have given 3-grain doses of Lazell, Marsh & Gardiner's solid extract every two and three hours for six and eight successive doses without the slightest unpleasant effect, though one dose of gr. $\frac{1}{2}$ of the solid extract of unknown (to me) make caused in another (a lady) patient severe stiffness of the jaw, anæmia of the brain (fainting), and nervous trembling, which symptoms disappeared in about an hour.

2. The specific effect of the Indian hemp in this, as in other cases, was first to depress the senso motor system, then to stimu-

late the ideational, emotional, perceptive, and memorial psychic-centres, the optic, auditory, and pneumogastric nerves, while paralyzing *the will*.

3. I cannot forbear comparing this state of trance with that psychic condition found in the ordinary hysterical paroxysm. In both there is complete subjugation of the *will* to the exalted other psychic functions.

4. Doubtless the serious disturbance of the circulatory system in my experience was largely due to the combination with ergot.

5. Taking the present for a test case, the value of Parke, Davis & Co.'s preparation of haschish as an exhilarant, at least, cannot be questioned.

Those interested in the subject of the physiological action of the drug will find much valuable information and detailed cases in the following works :

1. Pereira: "Elements of Materia Medica," edit. 1860, art. *Cannabis Sativa*, where an interesting case of haschish catalepsy may be found in detail.

2. Stillé: "Therapeutics and Materia Medica," edit. 1860, pp. 81-86; the author referring to one case, among others, that of Dr. John Bell (originally reported in the *Boston Medical and Surgical Journal*, 1857, p. 209), which in some particulars resembles mine.

3. Wood: "Treatise on Therapeutics," edit. 1876, art. *Cannabis Indica*, where he records his own experience, greatly differing from mine.

Clinical Reports.

A CASE OF ANEURISM OF THORACIC AORTA.

REPORTED BY A. M. BARKER, M. D.

O. B., German, single, 50 years of age, and by occupation an artist, came under my care early in December, 1883, with the following history: For about one year he had been troubled

with what he considered to be dyspepsia, and had been treated as a private patient, for that disease, at one of our public hospitals for several weeks. The first of November last, receiving no benefit from treatment, he left and took up his abode in a boarding house. He consulted several physicians and his disease was variously diagnosed as dyspepsia, Bright's disease, consumption and heart disease.

I found that he was vomiting his food, suffering severe burning sensations in his stomach; that at night he suffered very severe pain between the scapulæ, which disappeared during the day; that he had a severe cough, attended with expectoration of matter of a bluish-white color; that he had severe paroxysms of dyspœna. The bowels were constipated and the quantity of urine passed estimated to be normal. Some ten years ago he had a sore on his penis, which followed a suspicious connection, but healed within a week after its first appearance by the application of some simple caustic. No history of the secondary or tertiary symptoms of syphilis could be obtained. He had never had a rash about his body, his throat had not been sore, nor had his hair ever fallen out. He did not suffer from headache. The pulse was normal in frequency and character and there was no acceleration of temperature. Parents both died at an advanced age, and no history of any hereditary disease could be obtained. He was emaciated, face of sallow color and features pinched. The tongue presented a normal color. The respirations were a little difficult, but were not hurried. The inspiratory act seemed to be prolonged. An examination of his chest, by inspection, revealed in the infra-clavicular region—on the right side, about one inch from the sternum, between the first and second ribs—a violent pulsation, which could not, however, be called a pulsating tumor. This pulsation was more evident upon palpation, but was not attended by any peculiar whirring sensation. Posteriorly, no pulsation could be detected. Auscultation failed to give an aneurismal bruit, but a slight blowing sound was heard over the pulsating point men-

tioned. Posteriorly, no pulsation or sound could be detected. The respiratory murmur was normal, except on the left side, where it was heard less distinct than on the right. The heart sounds were normal. There was no œdema of the extremities and the abdomen was not distended. The area of dullness over the liver was normal, and no tenderness was found over that organ, nor the stomach. Some disease of the aorta was diagnosed, probably aneurism, and the patient placed upon potass. iod. gr. v, tr. belladonna gtt. x, and elixir calisaya ʒi, three times daily, after meals. He was also ordered to take, at bed-time, one grain of codeia, and to repeat every three hours until asleep or free from pain. To overcome the constipation he was given a teaspoonful of Carlsbad salts each morning, and a bread and milk diet, with beef tea made from Liebig's ext., and Hungarian wine ordered. The cause of his indigestion was well explained, as he was about to take his evening meal at the time of my visit. I noticed he had ham, fried potatoes, potato salad, a large slice of Bologna sausage and limburger cheese, and a cup of tea. He said he could not eat what was brought to him, and often sent it away untouched. The landlady, therefore, was carefully instructed in regard to his diet. A specimen of urine was requested to be sent to my office. An examination showed it free from albumen or sugar, and of normal specific gravity.

In two weeks' time he was improved so that he could attend to his business in his room, which was preparing pictures on stone for engravers. The first week in January he visited Niagara Falls in company with a friend and insisted that he walked ten miles, and felt first rate. As he was simply anxious to get well enough so that he could go to Germany to die, he was advised to take passage at once for home, but as he was better, and able to go to his work each day, he preferred to take his chances a little longer here. Early in February he called at my office and was suffering from severe dyspnœa. An examination revealed sonorous and sibilant rales over the whole of the posterior and part of the anterior portions of the chest. He was

given an expectorant mixture in combination with Hoffman's anodyne, under which he improved and again resumed work. About the middle of February I was called by telephone to attend a patient who had started for my office but was taken sick on the way and could get no further. Upon my arrival, I found it was my patient with the aneurism. He felt well when he left his boarding house, but was attacked suddenly with what he said was a fainting spell, and obliged to lie down. After a short time he was revived sufficiently to get into my sleigh and was driven home. Brandy and aromatic spirits of ammonia were prescribed, and rest in bed. But as he felt so well he went to his place of business and resumed work.

He continued quite well till the 5th of March. On the evening of that day I was summoned in haste and told that he was dying. I found him in bed breathing with very great difficulty. The face, head, hands and upper part of the chest livid. The blood vessels were distended and protruded very prominently, particularly on the forehead. The pulse was full and hard, and beating about 120 times per minute. It seemed as if he could live but a very short time. Stimulants were administered and an anodyne given. The next morning he appeared comparatively comfortable; the breathing was much easier and it almost seemed that he had a new lease of life. He continued comfortable through the day, but at night another paroxysm came on, more severe, if possible, than the first. During my absence Dr. Hopkins was called, and the paroxysm was so severe that it was found necessary to administer chloroform, which gave relief so that he rested comparatively comfortable through the night. The next morning, early, I was summoned in haste and found him suffering from another paroxysm of dyspnœa, more violent, if possible, than the others. An anodyne was given in the form of a hypodermic injection of morphine, gr. $\frac{1}{4}$, which gave relief for several hours, when he was again taken with the dyspnœa and died suddenly.

Autopsy, twenty-four hours after death: Rigor mortis, well marked; brain not examined. The liver, stomach, kidneys and spleen were found to be healthy. There was a small quantity of urine in the bladder, estimated at three ounces. Examination of thoracic cavity: The right lung was found to be healthy; the left was congested, and the mucous membrane of the bronchia was red and contained a small quantity of mucus. There was no softening, nor evidence of inflammation, besides that seen in the bronchia. The heart was enlarged and the muscular tissue soft and friable. The valves were healthy. The aorta was immensely dilated, and at the commencement of the descending portion of the arch a large tumor was observed. This was found to be firmly adherent to the bodies of the first four dorsal vertebræ and corresponding ribs, which were eroded, and a portion of their tissue absorbed. These formed the posterior wall of the tumor, so that it was adherent closely to the bone. It therefore became necessary to tear it away in order to remove the aorta and heart. As this was done, a large clot escaped, the examination of which showed that it gradually obstructed the circulation through the aorta until it became almost complete and the patient died.

Several thoughts occur in connection with the case:

First—The correct diagnosis of the disease was overlooked by several practitioners, I am convinced, from the fact of a careless observation of symptoms and neglect of a thorough physical examination.

Second—This occurred in one of our large public hospitals.

Third—That death occurred from the effect of the tumor upon the circulation, and not upon its pressure upon neighboring organs, nor from the almost universal cause of death, viz.: spontaneous rupture.

Fourth—An effort was made by nature to cure the disease by solidification of the sac by means of coagula, the location of the clot and adhesion of the tumor to the thoracic walls verifying this conclusion.

SELECTIONS FROM THE SURGICAL CLINICS, MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY—SESSION OF 1883-4.

REPORTED BY FRANK HAMILTON POTTER, M. D.

The following cases are selected from those presented at the regular surgical clinics of Prof. W. S. Tremaine, at the Hospital of the Sisters of Charity, Buffalo, during the winter of 1883-4.

These clinics were given primarily for the students of the medical department of the University of Niagara, but they were generally attended by others not connected with the University—students and medical gentlemen of the city interested in the science and art of surgery.

In the report it is intended to give merely the history in outline of each case, desiring in this way to show the great variety of surgical injuries and diseases presented for study, and the uniformly good results obtained. The etiology, pathology, and treatment are thoroughly explained to the students as the patients are brought before them, and whenever the opportunity offers they are invited to examine the case and make a diagnosis, and are thus taught in a practical manner the art of physical diagnosis. This method of bedside instruction is one of the features of the University, the object being to make the students perfectly familiar with the best manner of conducting an examination, and to teach them how to apply in actual practice the principles taught in the lecture room. During the surgical operations they are frequently asked to render assistance, and thus, at an early period of their studies, become familiar with the many details attending any surgical proceeding.

Before presenting the cases it may be proper to explain just what is meant by the term "antiseptic surgery," as made use of in this report. Dr. Tremaine teaches the principles of aseptic surgery as founded upon the latest scientific investigations. Listerism is not carried to the extent advocated by its author, but in the treatment of wounds and surgical injuries the following principles are insisted upon:

- I. The thorough cleansing of all wounds.

II. The *entire* arrest of hemorrhage.

III. Complete drainage, particularly of all deep-seated wounds.

IV. The use of antiseptic agents, such as bichloride of mercury, iodoform, carbolic acid, alcohol, etc., in dressing all wounds, in disinfecting the instruments, the hands of the operator and assistants, and the parts of the patient to be operated upon.

V. Protection of the wound from any deleterious external influences.

VI. The use of catgut, which has been rendered antiseptics for sutures and ligatures wherever possible, and when from the nature of the wound this cannot be used, the substitution of gold and silver wire.

VII. The use of antiseptic dry absorbent dressings, such as borated cotton, marine lint, jute, sublimated peat, etc.

VIII. The dressings are not changed unless there is some particular indication for so doing. This latter point is especially insisted upon, and with the most pleasing results. If the above principles are thoroughly applied, it is seldom necessary to disturb the wound until healing is completed. Of course, when any unfavorable indication is observed, either in the condition of the patient or the wound, the dressings are removed at once.

The care necessary in the application of these principles to the treatment of wounds is amply rewarded, as the results in the following cases will show:

Case 1. James Morelli, Italian; age, 60. This man was injured upon the railroad, sustaining a compound fracture and dislocation of the left ankle. He was not seen by Dr. Tremaine until three days after injury, when the leg was found to be in a condition of intense cellulitis, with commencing gangrene over the internal malleolus. Symptoms of septicæmia. Amputation of leg at union of proximal and middle third; antiseptic dressing and union by first intention, the patient being around the ward within ten days. This man could not speak a word of

English, and could with difficulty be made to understand what was required of him. He was exceedingly filthy in his habits, urinating in bed, etc. A large bed-sore developed over the sacrum, which retarded his convalescence. It seems he was under the impression that his leg would grow again, and when he became satisfied from conversation with some of his countrymen that this could not occur he was greatly depressed and refused to leave his bed. Other bed-sores formed, and symptoms of pyæmia developed, from which he finally died. The septic infection was probably produced through the bed-sores.

Case 2. T. B., American; age, 22. Two days previous to admission his right hand was caught between the bumpers on freight cars and severely contused. The skin was not broken and the injury did not extend above the wrist. He refused to allow the attending surgeon to treat it in the proper manner, and was finally persuaded to enter the hospital. Upon admission, the entire hand was found to be gangrenous, and the fore-arm severely inflamed, the cellulitis extending to the elbow. There were also symptoms of septicæmia. The arm was amputated at the juncture of the middle and lower third, and antiseptic dressings applied. Slight suppuration occurred in this case, but he made a good recovery, being around the ward in two weeks.

Case 3. George B., American; age, 26; epithelioma on left side of nose, four centimeters in length and two centimeters in width. This was removed by elliptical incisions, the wound sprinkled with iodoform and dressed with marine lint. Patient discharged in one week, the wound having healed without change of dressing. This case was interesting from the fact that the father of the young man presented himself at the clinic with the same disease, involving about the same amount of tissue in the left breast. This was also removed, but recovery was not as rapid as in the son's case. He was quite unruly and succeeded in tearing out the stitches. The wound was then allowed to heal by granulation, it being dressed every few days with iodoform and marine lint. Recovery occurred in four weeks.

Case 4. C. M., Irish, age 25, while working upon the Cantilever bridge, at Niagara Falls, lost his balance and fell a distance of sixty feet, striking upon the rocks below. Besides several contusions of the soft parts, he sustained a simple fracture of the tibia and fibula of left leg at the middle third. For the first week the leg was dressed with lateral paste-board splints. These were then removed and the Bavarian apparatus applied. Patient discharged fully recovered at the end of six weeks.

Case 5. G. S., English; age, 11½; admitted to the hospital with the right arm, at the juncture of the proximal and middle third of the humerus, severed by railroad car passing over it. The remaining part of the arm was severely contused and lacerated. Amputation was performed at the shoulder joint. All bleeding points were secured and the flaps accurately adjusted. From the condition of the soft parts it was considered probable that sloughing of the flaps would occur, and the injuries of the vessels justified an apprehension of secondary hemorrhage. Both these accidents happened. Hemorrhage was detected on the second day after the operation, and again on the eighth day. In both instances the blood came with great force, and was apparently from the axillary artery. The bleeding was promptly controlled by the resident internes. The sloughing of the flaps delayed convalescence, that part of the wound healing by granulation. The boy rallied well from the injuries and from the operation, the temperature never rising above 101° F. Notwithstanding the interference of these various accidents with the healing process, recovery was rapid, the patient leaving the hospital at the end of eight weeks. The antiseptic method was carefully used in this case; as soon as the sloughing occurred and pus appeared, dry absorbent dressings were applied, and these were changed every second or third day, according to the necessity. The appropriate constitutional treatment was employed.

Case 6. M. J., Irish; age, 40; admitted to hospital with extensive disease of elbow joint of left arm of three years' standing. There were various sinuses opening into the joint, through which pus was discharging. The tissues were swollen and of a reddish color, showing the disease was not confined to the bones. The patient stated that three years before, without accountable cause, an abscess formed, which was opened, and from which a quantity of sanious pus was discharged. This abscess communicated with the cavity of the joint. Patient was etherized on March 10th, and an exploratory incision made with the view of excising the elbow joint. It was found, however, that the disease had progressed to such a degree, and disorganization was so extensive, that amputation rather than excision would be justifiable. This was accordingly performed at the juncture of the proximal and middle third of the arm. Even then an osteo-myelitis was found to extend above the point of amputation. The antiseptic method was carefully used in this case. The patient rallied well from the operation, the temperature and pulse remaining normal during the entire course of treatment. There was no suppuration, the wound healing by the first intention. Four weeks after the operation the wound had been dressed but twice.

Case 7. E. G., German; age, 28. His left arm was caught between bumpers on railway carriages, causing a compound comminuted fracture of the elbow joint. The external wound extended from the external condyle of the humerus upwards and outwards a distance of nine centimeters. The brachial artery and median nerve were exposed so that they could be picked up between the fingers. A counter-opening was made on the posterior surface of the arm, and the comminuted bone removed. This consisted of the head of the radius, the external condyle of the humerus and part of the olecranon process of the ulna. The wound was then irrigated with a solution of mercuric bichloride (1 part to 1,000), a drainage tube passed through from the anterior to the posterior wound, the fore-arm placed at an

angle of 90°, with the arm and the elbow surrounded with bags of peat which had been soaked in the antiseptic solution. These bags were held in place by bandages. The third day after injury the pulse was 108, the temperature 101° F. The next day both pulse and temperature were normal. The temperature did not rise again above normal, with one exception. On the eighth day the patient had a diarrhœa, with a temperature of 100° F. The diarrhœa was controlled by small doses of Dover's powder, and convalescence was not again interrupted. There was no suppuration. The wounds were dressed but twice during the three weeks following the injury. At this time the patient was walking around the ward, his arm supported by a splint placed on the under surface. The external wounds had nearly healed.

(To be Continued.)

Society Reports.

BUFFALO MEDICAL AND SURGICAL ASSOCIATION.

Regular Annual Meeting, April 1st, 1884.

President, Dr. John Cronyn, in the Chair.

Present — Drs. Fowler, Berkes, Moody, Dayton, Diehl, O'Brien, Phelps, J. C. Greene, Strong, Folwell, Hopkins, Johnson, Hauenstein, Hayd, Dorland, Bartlett, Mann, Tremaine, Howe, Rochester, Long, Hartwig, Heath, Frank, Weil, Feli, Runner, Brecht, F. H. Potter, Peterson, Davidson, Van Peyma, Putnam, Wm. Ring, W. W. Potter, Stockton, Hubbell, Dagenais, and, by invitation, Drs. Niemand, Hawkins, B. G. Long and Keene.

Applications for membership were received from Drs. B. G. Long and W. H. Thornton, who were duly elected.

Essay by Dr. M. D. Mann. Subject: "Axis Traction Forceps, with Exhibition of Instruments."

After the reading of the essay, the President suggested that as the subject was an important one, and it being the annual meeting, the time for discussion must necessarily be short. Con-

sidering the amount of business on hand, he thought it advisable to postpone the discussion until a future meeting.

Dr. Rochester thought that the discussion would, at best, be theoretical, as very few of the gentlemen present had had any experience with the instruments shown. Referring very briefly to his own experience, he felt certain he had seen the head perforated where it was unjustifiable, there being no pelvic deformity.

Dr. Hartwig felt that all could be done that was necessary with the ordinary instruments. He also remarked that some of Dr. Mann's drawings, as exhibited, were somewhat faulty.

Upon motion, it was decided to postpone the discussion to some future meeting.

Prevailing Diseases—Dr. Mann asked in regard to there being any puerperal fever in the city.

Dr. Brecht reported one case.

Dr. J. C. Greene said there were several in the lower part of the city.

Miscellaneous Business—Dr. Johnson made a few remarks regarding the bill to create a Board of Pharmacy. He said the bill had just passed the legislature and was now before the governor, and asked that this association endorse it by the following resolution:

"*Resolved*, That this association cordially endorse the Erie County Pharmacy Bill, and hope it may become a law."

Upon motion, the resolution was carried.

The Treasurer submitted his annual report, as follows:

Cash on hand, April 3, 1883,	-	-	-	-	-	\$46.34
Cash collected during year,	-	-	-	-	-	92.05
						\$138.39
Disbursements,	-	-	-	-	-	62.95
Cash on hand April 1, 1884,	-	-	-	-	-	\$75.44

F. E. L. BRECHT, *Treasurer*.

Drs. Johnson, Greene and Heath were appointed an auditing committee to inspect the Treasurer's accounts.

The Secretary reported as follows :

Mr. President and Members of the Association :

In presenting my second annual report, I take pleasure in stating that the interest taken in our meetings during the past year has been a source of gratification and argues well for the future prospects of the association. Our membership has steadily increased and is now larger than ever before, being, at present, ninety-four, not including several who will be admitted as soon as qualified. The papers read have been of exceptional interest, and nearly all published in full.

I regret to say that the Treasurer reports some of our members, as yet, in arrears, and I take the liberty to suggest that it be made the duty of the Treasurer to prefer charges when dues are not paid as prescribed by the by-laws.

CLAYTON M. DANIELS, *Secretary*.

A vote of thanks was unanimously tendered the Secretary and Treasurer for services rendered the association.

Election of Officers—The following were duly elected for the ensuing year: President, F. W. Bartlett; Vice-President, C. G. Stockton; Secretary, Frederick Peterson; Treasurer, F. E. L. Brecht.

Installation—Upon retiring from the Chair, Dr. Cronyn congratulated his successor upon his preferment with a few pleasant and appropriate remarks.

Dr. Bartlett, in response, spoke of his grateful acknowledgement; also, referred to Dr. Cronyn's excellent qualities as a gentleman and presiding officer, and only hoped that at the end of the coming year it might be his good fortune to retire in as becoming a manner.

A unanimous vote of thanks was tendered Dr. Cronyn and ordered spread upon the minutes of the association.

Adjourned.

CLAYTON M. DANIELS, *Secretary*.

ERIE COUNTY MEDICAL SOCIETY.

A special meeting of the Erie County Medical Society was held at the Buffalo Medical College April 8, 1884.

Meeting was called to order by the President, Dr. J. C. Greene, who stated that according to the call the meeting was held for the purpose of receiving the report of the Board of Censors relating to pending legislation concerning the incorporation of medical colleges.

There was a large attendance of the city members.

After some delay, as the board was not present to report, Dr. Gay moved to adjourn, but before the motion was put, the Censors made their appearance.

Dr. Storck, Chairman of the Board of Censors, reported, in behalf of the board, that the action taken by the board in the present investigation and preparation of the report was in accordance with instructions received from the society at a former meeting. He stated that much pains and money had been spent in investigating the legality of charters of medical colleges, and that the Board of Censors believed it their duty to treat the present college, viz., Niagara University, the same as they had treated the "Mohawk College," so called.

Dr. Storck then called upon Dr. Hopkins, the secretary of the board, to read the report, which was as follows:

To the Medical Society of the County of Erie:

MR. PRESIDENT AND GENTLEMEN—Your Board of Censors would report that at a meeting of the board held February 20, 1884, certain official communications were received from the secretary of the regents of the university of the State of New York, from which we make the following quotations, viz.:

"The charter to Niagara University was issued under a special statute, passed by the legislature at its last session, Chap. 92, Laws of 1883. The charter does not differ materially from an ordinary college charter. There is no mention, either in the application or the charter, of a medical department.
* * * The college will have the same authority to establish a medical department as Rochester University, no more nor less. * * *

"I cannot cite any instance of a college or university now conducting a medical department under a charter granted by the regents except Niagara University."

The above are quotations. After a careful examination of the charter of Niagara University and that of Rochester University to which it is likened by the secretary of the regents, and a full consideration of the correspondence above referred to, the Censors unanimously adopted the following resolution:

"*Resolved*, That the Board of Censors of the Medical Society of the County of Erie hereby request of Messrs. Rogers, Locke & Milburn an opinion upon the authority of Niagara University to conduct a medical department and to grant to its graduates the degree of M. D., the said opinion to be for the information of the said Board of Censors, the expense of the same not to exceed the sum of \$25.00."

On the 21st of March the Censors met and received the opinion of Messrs. Rogers, Locke & Milburn, which accompanies this report, and which reaches the conclusion that Niagara University is a literary college with authority to grant literary degrees only, and without the authority to grant the degree of M. D.

Inasmuch as the belief prevailed with the Censors that the facts set forth in the legal opinion were competent to establish the reasonableness of its conclusions, it was decided to do what could be done to relieve the members of the medical department of Niagara University from the embarrassments of their situation. Accordingly, the following letters were directed to the medical faculty and the trustees of the above college:

BOARD OF CENSORS OF THE MEDICAL SOCIETY OF THE COUNTY OF ERIE.

BUFFALO, March 21, 1884.

DEAR SIR—The Board of Censors direct me to inform you that at a recent meeting of the board a legal opinion was presented upon the question of the competency of the charter of the corporation known as the Niagara University, of which Board of Trustees I am informed you are a member. In this opinion the Censors were advised that the charter of the said corporation did not authorize the same to confer the degree of M. D. An adjourned meeting of the Board of Censors will be held on the 28th inst., at four o'clock P. M., at the office of Dr. Edward Storck, for the further consideration of this question, and the board will be pleased to hear any communications which you, or the trustees of the Niagara University, may wish to make to them at that time.

Your obedient servant,

H. R. HOPKINS, *Secretary*.

To Rt. Rev. S. V. Ryan, D. D., President Trustees Niagara University.

To which the following replies were received:

March 22, 1884.

Dr. H. R. Hopkins:

DEAR SIR—Your communication has been received, and the faculty has referred it to the trustees of the university.

Yours respectfully,

A. A. HUBBELL.

BUFFALO, March 21, 1884.

H. R. Hopkins, M. D., Secretary:

DEAR SIR—In reply to your favor of this date, I beg to say, that I hardly think it in place for me to say anything to the Board of Censors on the subject in question. The Board of Trustees of the Niagara University believe that they have, from their charter and the Board of Regents, power to confer degrees in all the departments which the University is empowered to teach, and they are fortified in their belief by the best legal advice they could obtain.

Yours most respectfully,

S. V. RYAN, *Bishop of Buffalo.*

This attitude of the parties chiefly interested in the question of the validity of the charter of Niagara University, made up, as it was, of apparent indifference on the one hand and entire confidence on the other, was one not easy to understand.

Shortly after this correspondence between the authorities of Niagara University and the Censors, facts came to light which may have a bearing upon the situation. Under date of March 11th, Mr. Welch, member from Niagara county, introduced a bill to the Assembly, amending the act incorporating the Seminary of Our Lady of Angels. This bill passed that body by unanimous consent upon the 26th of March, two days before the adjourned meeting of the Censors at which the communication of the trustees of Niagara University was received.

This bill now before the Senate is plainly intended to legalize the medical department of Niagara University, and the Censors are advised that in case it should become a law, would have such effect.

At the same time that the attention of the Censors was directed to this bill of Niagara University, their notice was also called to a bill before both houses of the legislature to legalize the past acts of the College of Physicians and Surgeons of Buffalo, and to provide that this college shall have the right to continue as a medical college and to grant the degree of M. D.

The Censors would call the attention of the society to a prominent feature common to both of these bills, which, in our judgment, renders them liable to adverse criticism.

THE BUFFALO COLLEGE OF PHYSICIANS AND SURGEONS.

SECTION I. The institution known as the College of Physicians and Surgeons of Buffalo may confer the degree of Doctor of Medicine upon and issue diplomas to such students thereof as shall have pursued in said institution the course of study prescribed by its rules and regulations, and who, after examination by the faculty and trustees of said institution, are entitled to such degree and diploma.

SEC. 2. All medical degrees and diplomas heretofore granted by said institution to the students or graduates of said institution, who shall have pur-

sued in said institution the course of study prescribed by its rules and regulations, and which degrees and diplomas have been conferred after examination entitling said students and graduates to the same, and all degrees and diplomas of such institution which may be conferred and issued under the provisions of this act are hereby legalized and declared to be in all respects valid and of equal sufficiency, force, and effect as medical diplomas, certificates, or licenses granted by any lawfully constituted or incorporated medical society, college, university, or chartered medical school in this State.

SEC. 3. This act shall take effect immediately.

STATE OF NEW YORK.

No. 429.

IN ASSEMBLY.

March 11, 1884—Passed 26th.

Introduced by Mr. Welch—read twice and referred to the committee on public education—reported favorably from said committee, and by unanimous consent ordered to a third reading.

AN ACT

To amend chapter one hundred and ninety of the laws of eighteen hundred and sixty-three, entitled "An act to incorporate the Seminary of Our Lady of Angels," and the acts amendatory thereof.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section six of chapter one hundred and ninety of the laws of eighteen hundred and sixty-three, entitled "An act to incorporate the Seminary of Our Lady of Angels," and as amended by chapter ninety-two of the laws of eighteen hundred and eighty-three, is hereby amended so as to read as follows:

§ 6. Whenever, in the opinion of the regents of the university, the state of literature in the said seminary and the value of its property according to the regulations of the said regents shall justify the same, the said regents may, on the petition of the trustees, by an instrument under their common seal, erect the said seminary into a college with such name, and such number of trustees, and on such conditions, and with such powers and privileges conformable to law as the said regents may deem proper; and the said college shall have the right to maintain any department of learning that is maintained by any college or university in this State, and may locate and maintain any department thereof in the county of Erie; and the trustees of said college shall have the power and right to grant and confer any degree which may be or is granted and conferred by any college, university or other institution of learning in this State legally authorized so to do; and every diploma given in testimony thereof shall entitle the possessor to all the immunities and privileges which by law or usage are allowed to possessors of similar diplomas granted by any college, university or other institution of learning in this State.

§ 2. This act shall take effect immediately.

It will be observed that these bills would confer upon the trustees of their respective colleges the authority to grant the degree of M. D., and that this grant of authority is absolutely without restrictions or conditions of any kind whatever.

The Censors are positively informed that there is not a medical school in the State which has such unconditional powers, but in every case in which a charter has been granted, either to a medical school or to a university with authority to maintain a medical department, certain explicit restrictions and conditions have been placed upon the power to grant the degree of M. D. We are also unable to find any reasons why the trustees of the College of Physicians and Surgeons of Buffalo, or the trustees of the Seminary of Our Lady of Angels, should receive such a grant of authority as has never yet been given to the trustees of any medical school in this State, a grant which gives these trustees absolute, unrestricted power to license physicians to practice the art of medicine.

In the legal proceedings instituted by this society against one of these medical colleges, familiarly known as the Mohawk College, there was one principle kept prominently to the front, a principle which the courts did not fail to recognize and sustain, to wit:

That the responsibilities of a medical college, a body which licenses physicians, are responsibilities of the highest order.

That the legal restrictions imposed by the people upon the formation of such schools are in no manner onerous or difficult of fulfillment.

That the current of professional and of public opinion runs in the direction of raising rather than lowering of such restrictions, and that under no circumstances should such restrictions be disregarded.

In the belief that the facts contained in this report are of such character and moment as merit the special consideration of this society, and for the purpose of receiving such instructions as it may please you to give, the foregoing is respectfully submitted in compliance with a resolution of the Board of Censors.

EDWARD STORCK,
P. W. VAN PEYMA,
H. R. HOPKINS.

After the report was read, Dr. Howe moved its acceptance.

Dr. W. W. Potter moved as an amendment that that the report be received.

Dr. Howe accepted the amendment of Dr. Potter.

Motion, as amended, was adopted.

Dr. Potter asked by what authority the Board of Censors made the present investigation, and asked the secretary to read from the minutes the resolutions giving them such authority.

Dr. Wyckoff suggested that some one who was familiar with the minutes of former meetings would perhaps find the resolutions more quickly than the secretary. Dr. Storck looked over the minutes of previous meetings, but failed to find what he was looking for, and explained to the society that although he could not find the proper authority for the board's action in this matter just at present, that it was given to them by resolutions adopted at a former meeting.

Dr. W. W. Potter moved that as the records failed to show any authority for the present investigation, that so much of the report of the Board of Censors as related to the Niagara University be laid on the table, and called for the ayes and noes. The motion was lost, the vote being as follows :

Ayes—Cronyn, Gay, F. H. Potter, Heath, Daniels, Frederick, Lothrop, Hoyer, W. W. Potter, C. A. Ring, J. L. C. Cronyn, Ingraham, Lynde, Briggs, W. D. Green, Banta, Armstrong, Walsh, Berkes, Jackson, Pattison, Bourne, Dambach, Clark, Davidson, Fell, Willoughby, Kiefer, Hartwig, Runner, Daggett, Tremaine, Stockton, Hubbell, York—35.

Noes—Abbott, King, Putnam, Barrett, Barker, Fowler, Johnson, Wyckoff, Coakley, Brown, E. H. Long, Wm. Ring, Diehl, Mann, Peterson, Mynter, Gregory, Rochester, Howe, McBeth, Hopkins, E. Storck, Cary, Bartow, Folwell, Mackay, Warren, Hauenstein, E. E. Storck, Hebenstreit, Frank, Van Peyma, Keene, Phelps, Niemand, Schade, Wetzel, Hayd, Haberstro, B. G. Long—40.

Dr. Barker asked who were legal voters, and Dr. Storck moved that a recess of five minutes be taken to enable members to pay their dues and become legal voters. Carried.

Meeting was then called to order, and the ayes and noes called for on Dr. Potter's motion which was lost (by the above vote).

Dr. Hopkins stated that two persons, viz.: Dr. Tremaine, (U. S. A.,) and Dr. Heath, (U. S. H. M. S.,) whose names had been called, had not complied with the regulations of the by-laws as applied to members, and consequently had no right to vote.

Drs. Tremaine and Heath said that they supposed themselves to be members; if it was not so they had no desire to vote.

Dr. Hopkins read from section 5 of the by-laws to show that Drs. Tremaine and Heath were not members.

The Chair ruled that Dr. Hopkins' point was well taken.

Dr. Potter moved that inasmuch as the two gentlemen named were already *de facto* members, the rules be suspended and Drs. Tremaine and Heath be now elected to full membership. Carried.

Drs. Barnes and Wall were, by vote, excused from voting on questions before the society.

Dr. Barker offered the following resolutions, and moved their adoption:

WHEREAS, Certain efforts have been made in the legislature of this State which have for their aim the enactment of laws permitting the trustees of certain colleges or universities to grant the diploma of Doctor of Medicine without such restrictions as to age, moral character or professional qualifications as are binding now on all other such institutions in this State; and,

WHEREAS, The statutes already provide for the establishment of such institutions when they conform to certain specified requirements; therefore,

Resolved, That the permission to grant such diplomas without the restrictions ordinarily enjoined tends to lower the standard of medical education, and that as such we deem it unwise and think it should be condemned.

Resolved, That the Board of Censors be hereby empowered to communicate with the Legislature of this State, and also to transmit to that body a copy of these resolutions.

Dr. Ring offered as an amendment to Dr. Barker's resolution that it apply to the Mohawk College only, for he did not wish the members of Niagara University classed with the men who were endeavoring to run the other institution named. Lost.

Dr. Rochester thought that the resolution should be carefully considered; that it did not apply to any particular institution, whatever its name; that if a college was necessary let it be established on a proper basis, the same as all other medical col-

leges. If Niagara University is properly established let it live, but I am opposed to granting any college powers which other schools do not possess.

Dr. Cronyn thought that Dr. Rochester did not state the matter fairly; nor did the resolution. Niagara University did not ask for more power than is granted any other medical college. He thought Dr. Hopkins inconsistent when he opposed the Niagara University, for it was an institution of a higher order than many medical schools in the State. A preliminary examination and an extended course of study is required.

Dr. Davidson called attention to the fact that the faculty of the medical department of Niagara University was composed of some of the most honored members of this society, two of them its ex-Presidents. The college was established in Buffalo by an honorable and wealthy corporation, capable of more than complying with the law as to the foundation of universities, in possessing property to the amount of a quarter of a million dollars. The college had under its control the largest hospital in the city and enjoyed superior advantages for clinical instruction. It had bravely raised the standard of its requirements for graduation to those adopted by Harvard and the University of Pennsylvania. Notwithstanding all this, he would ask the society to remember the torrent of invectives and abuse which the new college received from certain members of the society. He had heard it said that the old college did not oppose the Niagara. It was, however, a curious fact that the lying (?) newspapers severally attributed these abusive or unfavorable opinions *only* to certain members of the faculty of the Buffalo Medical College. He also reminded the society how perseveringly certain members of the profession had circulated the story that the charter of the new college was defective. The faculty had acted in good faith, and had, as soon as the charge was made, submitted the question to a legal firm of the highest standing, who had given an unequivocal opinion as to the validity of the charter. To put an end to these injurious and false statements in the quickest way was the object of the trustees in applying for a special act more

clearly defining the powers and privileges of the university. He protested against the action of the Censors, in presenting the matter as they had, in that while asking the society to take action against special legislation, especially in reference to the Mohawk College, the society was being dragooned by interested parties into taking part in a conspiracy against the welfare of the Niagara University.

Dr. Tremaine read from the *Express*, of April 5th, extracts from an article embracing the opinion of Rogers, Locke & Milburn as to the legality of the charter of the medical department of Niagara University, and inquired by what authority the Board of Censors had forestalled the action of the society in giving publicity to matter which had not yet been brought before the society, and which was the exclusive property of the society. He considered the publication of the matter a direct insult to the faculty of the Niagara University, and charged the Board of Censors with violation of their duty. He believed the true motive which instigated the publication of the article in question was a desire to injure the Niagara University in the eyes of the people.

In reply to Dr. Tremaine, Dr. Storck disclaimed that the Board of Censors had anything to do with publishing the article embracing the legal opinion of Rogers, Locke & Milburn, which appeared in the *Express* of April 5th. He was sorry that certain statements appeared in the paper, and believed that the reporters were responsible for them.

Dr. Van Peyma believed no distinction should be made between the Niagara University and the Mohawk College; for, said he, "How do we know that the trustees of one school are any more trustworthy than those of the other?"

Remarks were made by several members, and Dr. Stockton moved, as an amendment, that the resolutions offered by Dr. Barker be laid on the table, and called for the ayes and noes. Lost—ayes, 31; noes, 41.

Dr. Barker's resolutions were then adopted, and the meeting adjourned.

EDWARD CLARK, *Secretary*.

Selections.

UTERINE HEMOSTATICS.

As a small contribution to the practical portion of the subject of uterine hemostatics, I venture to make a few remarks on the mechanical kinds, which we know by the name of plugs or tents. In doing so I must be understood to refer only to those cases where the cavity of the uterus is not sufficiently large to contain blood in quantity, the loss of which from the circulation is likely to produce anything of serious detriment.

If we go back to former practice and to text-books, we find it recommended that in case of threatened abortion with much hemorrhage, a vaginal plug should be used. The vaginal plugs recommended are the tampon, cotton or wool, silk or cambric handkerchief, rags or sponges passed in till the vagina is filled up. An India-rubber ball also has been suggested, covered with felt or such like material. Now, even with the best of management, there is much of distress to the patient in the use of the vaginal plug, and, with regard to its hemostatic effect, very much uncertainty, and generally partial failure, and in the hands of the unskillful and careless, there is positively no restraint of bleeding worth the mention. If at any time any good results be produced, it is rather by the reflex irritation that it causes, whereby the uterus expels its contents. It is not so very rare an occurrence that one finds, on removal of the plug, the ovum on the uppermost part of it. But, besides its palpable inefficiency, a vaginal plug, being of a porous texture, absorbs a large quantity of blood, and thus conceals it from our sight. It also favors decomposition, and this, as is well known, occurs within a few hours, and thus we have a new element of danger.

Again, in many cases, when called to such a case, we have no speculum at hand, and although we may extemporize one out of card-board, book covers, or such like material, yet, before we

have thoroughly and firmly filled the vagina we must have given the patient considerable pain and distress, besides having occasion to put such pressure on the urethra as may necessitate subsequent catheterism. For these reasons, namely, the imperfection of action, pain in introduction, and danger if left in long—in other words, its general crudity—it seems to me that as a general rule the vaginal plug should, in the cases I have supposed, be discarded. And as a substitute I would urge the employment of the cervical plug as being more precise in action, as well as being capable, if we use a dilating kind, of expanding the canal for the purpose of exploration, or for the expulsion or removal of its contents.

If, then, in any case of uterine hemorrhage where we have the conditions above alluded to, we desire, besides immediately checking the bleeding, to dilate, we can use the compressed sponge-tent, the best form of which I have found to be those made after Sir James Simpson's plan, by Duncan, Flockhart & Co., Edinburgh. These can be introduced by a long pair of forceps, and retained *in situ* by placing a piece of sponge, with tape attached, in the upper vagina. Of course, even these materials retain some secretions, etc., and tend to facilitate decomposition; but their removal and cleansing can be effected much more readily than the vaginal plug, because it requires but a small portion. The sea-tangle tent, by reason of its slipperiness, is unreliable as a plug in hemorrhage. If we desire, however, only to plug the cervix, we can very easily extemporize a plug from materials to be found in every house. For instance, take a stick (say a flower stick) about a foot long, and taper it at one end to about the size of a uterine sound, or larger; wind round this end, for about three inches down, strips of cambric rag, lint or sponge to the required thickness, judging from the size of the os. Strips of sponge can be readily obtained from the cup-shaped sponges of compact texture, and they can be tied on by thread, layer after layer, till the requisite conical form is obtained. The strips of the other material can be laid on simi-

larly. After the covered end has been well greased it is passed into the canal and the stick retained *in situ*, after the manner in which we tie in a catheter; an elastic tape, if obtainable, is to be preferred.

A catheter or bougie, at the end of a long injection tube, can be treated in the same way. If we require great precision of application, then it is best that the hand should hold the external end till the hemorrhage has ceased. If the catheter and stilet be used, then I have found it convenient to bend the external portion backward, between the buttocks, tying the tape around the ring of the stilet—the ends of the tape being carried, as usual, to back and front of the waist-band.

These more homely adaptations I have recommended, rather than the especially made kinds, because they are often wanted at times when we cannot send home for a showy sort. In any case, a cervical plug, expanding or not, is more precise, less crude and painful in application, than the vaginal, and, in my experience, nearly always successful. In all cases of abortion, where a plug is necessary, I would lay it down as a rule that the expanding tent should be employed. In case of flexion with abortion (and it is this complication which so frequently increases the hemorrhage) it will be found that the covered stick or stemmed plug, above described, is very useful, for, if the fundus be elevated during its introduction, the uterine cavity is straightened and evacuation of the contents thereby facilitated.

—J. Braxton Hicks, M. D., F. R. S., in *British Medical Journal*.

PATHOLOGY AND TREATMENT OF SOME FORMS OF HEADACHE.

At a meeting of the medical society of Islington, last week, a very interesting communication was read by Dr. T. Lauder Brunton, F. R. S., on this subject, of which the main points were as follows: Headache is usually the product of two factors—local irritation and general condition. The chief local causes are decayed teeth and abnormalities of the eye, although disease

of the ear and nose, inflammation of the throat, and local irritation of the pericranium, or of the skull in rheumatism and syphilis, are not to be forgotten. Decayed teeth may give rise to temporal or occipital headache when the molars are affected, and also, I think, the frontal when the incisors are decayed. The chief abnormal conditions of the eye are strain from reading, or working with imperfect light, or for too long a time, myopia, hypermetropia, astigmatism, and inequality of vision between the two eyes. Besides these, I think that alterations in the circulation and intraocular pressure are frequently produced by bile or poisonous substances circulating in the blood, and that probably also a rheumatic condition affecting either the eye itself or the muscles which move it is a not uncommon source of headache. Where both eyes are equally affected the headache is usually frontal, but when one eye is more affected than the other the headache appears either in the form of brow ache or megrim. In treating any case of headache, therefore, the first thing to do is to see whether the teeth are sound and the eyes normal. If anything is found wrong with either the teeth or the eyes, the defect should be at once corrected. The throat, ears and nose should be examined to see if any source of irritation is present there, and the surface of the scalp tested by pressure for rheumatic or syphilitic inflammation. The locality of headache is probably determined chiefly by the local source of irritation, but this differs according to the general condition. Thus frontal headache with constipation is usually relieved by purgatives; frontal headache just above the eyebrows, without constipation, is relieved by acid; and a similar headache, situated higher up, at the commencement of the hairy scalp, is relieved by alkalies. Vertical headache is usually associated with anemia, and is relieved by iron. The more or less continuous headache of syphilis is usually best relieved by iodide of potassium, but in order to gain relief the dose must sometimes be much larger than that usually given, and may range from

five grains up to thirty grains for a dose. Similar quantities of iodide of potassium are usually sufficient to cure the rheumatic headache.—*Louisville Medical News.*

Editorial.

ERIE COUNTY SOCIETY PROCEEDINGS AND NIAGARA UNIVERSITY.

We feel that an apology is due to our readers in other States than New York for admitting to our pages in this number so much matter of comparatively local interest. As, however, two of the editors of this journal are connected with the Niagara University, we could not epitomize or select from the proceedings of the Erie County Society without laying the JOURNAL open to the charge of partiality or of allowing personal interests to control its policy.

As the recognized organ of the whole medical profession in Western New York (and not of any clique or college), the columns of the JOURNAL are always open to both sides in any controversy, or on any question of interest to medical men. The JOURNAL, under its present editorial control, has not been slow to condemn a wrong or uphold the right, but on the question before the Erie County Society, for the reasons above referred to, we prefer to publish the official proceedings and to lay the whole matter before our readers without editorial comment.

We are heartily glad, however, to be able to announce that ANY POSSIBLE QUESTION AS TO THE VALIDITY OF THE CHARTER OF THE NIAGARA UNIVERSITY IS FOREVER SET AT REST by a special act which gives the medical department every power it desired, and which, having passed both houses of the legislature, received the Governor's assent on the 3d inst. We take especial pleasure in calling attention to the following among the provisions of the bill, which, it will be noticed, are precisely those contained in the first announcement of the college:

"And the trustees of said college may grant and confer the degree of Doctor of Medicine, but only upon the recommendation of the Board of Medical Professors of said college and of at least three curators of the medical profession fully and legally qualified to practice medicine and surgery, to be appointed by said trustees, and which curators shall not in any manner be connected with said college; but no person shall receive a diploma conferring such degree unless he be of good moral character, and of the age of twenty-one years, and unless he shall have received a good English education, and shall have pursued the study of medicine and the sciences connected therewith at least three years after the age of sixteen years, and received instruction from some physician and surgeon legally authorized to practice his profession, until he is qualified to enter a medical college, and shall also, after that age, have attended at least three complete courses of lectures in the medical department of some legally incorporated university or medical school, the last of which courses shall have been so attended in the medical department of said college."

We have not space in this number for the favorable comment which this bill deserves. The Niagara University has not only put an end to the injurious reflections cast upon the legal standing of its medical department, but by its course in adopting and pledging itself to sustain a curriculum in advance of that of any college in the State, it should and will receive the cordial support of the profession at large. We hope that the Buffalo Medical College will have the courage to adopt the same high requirements from the candidates for its diplomas. The medical colleges of Western New York will then be a credit to the State and country.

DR. THOMAS LOTHROP'S OPINION AND DISSENT.

The apologetic tone of the above editorial, on the question of the publication in the JOURNAL of the proceedings of the Erie County Medical Society, would compromise the rather positive

position of the writer, in case it should go forth without explanation. How it is possible for the "two editors connected with the Niagara University" to be impartial, when their relations to the profession at large, and the legal status of the Niagara Medical College, with which they are identified, are maliciously assailed, is a problem of difficult solution. Medical men are not devoid of bias on ethical questions, or on matters of personal or professional interest. The writer has never been able to follow to its conclusions that train of reasoning which leads the mind to settled convictions on both sides of the question at issue. His colleague seems an adept at this fallacious system of logic. We doubt whether the conclusions reached are satisfactory to him, and we are confident they do not subserve the great interests of the college which honors him with a chair, at a critical moment when enemies are assailing its reputation with a view to its destruction, and at the same time impugning the motives of its founders.

Passing these personal considerations, which influence the writer in this dissent, he begs to call attention to the principle by which the Censors pretend to be actuated in their pseudo-investigation. The great question of the day in professional circles is higher medical education. The Niagara Medical College is fully committed to this principle. Its curriculum is as complete as that of Harvard or the University of Pennsylvania. It requires a preliminary examination for admission to its classes, and three full courses of lectures before admitting the student to its honors. It submits its work to an independent board of examiners, thus divorcing the teaching and graduating powers, anticipating the aim and purpose of the State Medical Faculty Bill, which the JOURNAL has warmly endorsed. The high standing and character of its faculty give assurance that this standard will be fully maintained. What principle is involved in the opposition which the Censors have raised?

1. That the responsibilities of a medical college are "of the highest order."
2. That "the restrictions are in no manner

onerous or difficult of fulfillment." Supporting the Censors in these two propositions were the entire faculty of the Buffalo Medical College. How has this body met these responsibilities and observed statutory restrictions? What effort have they made to raise the standard of requirements for graduation? Opposition from this source could not have arisen from any special anxiety that the new college would do any poorer work than they have done in the education of medical men. The *casus belli* is not, then, one of principle, but lies, rather, in the ESTABLISHMENT and VERY EXISTENCE of the new college.

We congratulate, however, the medical profession in this county that two of the five members of the Board of Censors declined to sign the report, and we join in the feeling of conscious pride that there were thirty-five righteous men present at that meeting who were actuated by principle, rather than by prejudice, inspired by professional interest or personal animosity.

T. L.

NOTE.—The right of dissent to editorial opinion which each member of the staff enjoys has been greatly exceeded by Dr. Lothrop in the above. We permit its publication, however, as showing how hard it is for even good men "to refrain from words," or even to keep solemn pledges under provoking circumstances. We renew, however, our promise to our readers that the JOURNAL will continue to represent the profession. There will be no suppression of important society proceedings or other medical news for mere personal or party reasons. We do not believe that the suppression of the Erie County Society transactions (which our colleague desired) would "subserve the great interests of the college," etc., nor can we understand his timidity. We believe that the Niagara University can well afford publicity to any assault upon it.

EDITORIAL NOTES.

DR. FOLWELL, who occupied Dr. Hill's house on Delaware avenue, has removed his office and residence to No. 475 Virginia street.

THE Buffalo Medical and Surgical Dispensary has removed from Washington street to the "Emergency Hospital," corner South Division and Michigan streets.

WE are glad to note the return of Dr. John D. Hill to the city, after a year's absence in Europe. His many friends and patients will welcome his return most heartily.

LISTERINE AND LITHIATED HYDRANGEA.—The Buffalo Dispensary was the recipient of a liberal donation of this preparation from the makers. We learn from the professor of surgery that as regards Listerine, its use has but confirmed the high opinion which he has for years had of its value. Lithiated Hydrangea has been used with excellent results in cases of vesical irritation and to correct a uric acid diathesis. The combination of the salts of Lithia with Hydrangea is a happy one, and we are persuaded that in these cases we get more satisfactory results from the use of Lambert's Lithiated Hydrangea than we do from any other preparation.

Reviews.

Shakespeare as a Physician. Comprising every word which in any way relates to medicine, surgery or obstetrics found in the complete works of that writer, with criticisms and comparisons of the same with the medical thoughts of to-day. By J. P. CHESNEY, M. D., Prof. of Gynæcology in the Northwestern Medical College, St. Joseph, Mo., etc. J. H. Chambers & Co., Chicago, St. Louis, and Atlanta, Ga. 1884.

The conception of presenting Shakespeare's medical knowledge in a complete and connected form is doubtless original with the author. The work, as accomplished, must have required a deal of patient study and perseverance upon the part of its writer, but he has succeeded in producing so interesting and readable a book that every physician, or, at least, every one at all familiar with the great author's works, should possess a copy.

A Companion to the United States Pharmacopœia. A practical commentary and key to the latest edition of the Pharmacopœia, and containing the descriptions, properties, uses and doses of all official and numerous unofficial drugs and preparations in current use in the United States. Designed as a ready reference book and working manual for pharmacists, physicians and students. By OSCAR OLDBERG, Ph. D., member of the Committee of Revision and Publication of the Pharmacopœia of the United States of America; author of the "Unofficial Pharmacopœia," "The Metric System in Medicine," etc.; formerly Medical Purveyor of the United States Marine Hospital Service, and Professor of Materia Medica in the National College of Pharmacy, Washington, D. C., etc., and OTTO A. WALL, M. D., Ph. G., Professor of Materia Medica, Therapeutics and Pharmacy in the Missouri Medical College, and of Materia Medica and Botany in the Saint Louis College of Pharmacy; member of the Committee of Revision and Publication of the Pharmacopœia of the United States of America, etc. Wm. Wood & Co., New York. 1884. J. H. Matteson, agent, No. 11 East Eagle street, Buffalo, N. Y. Price, muslin, \$6.75; leather, \$7.50.

This work gives evidence of unremitting care and labor on the part of its most competent authors, and is believed to be the most practically useful book of its class. It contains all the essential and necessary matter of the more cumbersome dispensaries without the immense mass of information they contain, which is rarely called for, and which makes it more difficult to readily find the practical points. Among the specially valuable features we rate the excellent articles on the newer remedies, *e. g.*, convallaria, quebracho, coto, etc., the admirable illustrations representing actual specimens, by which, at a glance, a better idea of many drugs can be had than by pages of verbal description. Its 1,200 pages contain more than 650 engravings. Its graphic descriptions enable the physician to distinguish between drugs of good, bad or indifferent quality, while to the pharmacist, the practical nature and the completeness of the work makes it invaluable.

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Original Communications.

PUERPERAL FEVER.

BY DR. R. L. BANTA.

With considerable hesitation have I taken up a subject which has filled our medical journals of late, and which has been a theme of discussion in each of our late meetings.

The grand intellectual tournament which took place only a short time ago in the New York Academy of Medicine between those giants of the medical world, Thomas and Barker, with their several followers, was of more importance to humanity than twenty meetings of the "Cloth of Gold," which history has so carefully handed down to us. Lances were shivered in the encounter, but the "collision brought forth sparks," which it is to be hoped cleared up many of the dark points which surround the child-bearing woman.

Wishing to believe, with Dr. Thomas, that puerperal fever, whether it assumes a form of phlebitis cellulitis, lymphangitis or peritonitis is a puerperal septicæmia due always to an absorption of poison into the blood of the parturient woman through some solution of continuity in the tissues of the genital tract,

or, in the words of Lusk, "Puerperal fever is an infectious disease, due, as a rule, to the septic inoculation of the wounds which result from the separation of the decidua and the passage of the child through the genital canal."

For then, certainly, thorough cleanliness and antiseptic precautions should produce results which would make puerperal fever a disease of the past.

Surely, then, a physician could attend a case of scarlatina, typhus, erysipelas, septicæmia or puerperal fever, and, after taking a bath, sponge his body with a saturated solution of boracic acid, change his clothes, and, after soaking his hands for a few minutes in a solution of bichloride of mercury, one part to the thousand, feel perfectly safe that he himself was not the bearer of any septic material. Then, to make things doubly sure, all the surroundings should have a thorough cleansing, and at the conclusion of labor the slightest wound of the vulva should be treated as a dangerous point, ready to receive an infectious poison.

And for fear that a micro-organism might, in its wanderings, have gained entrance into the genital canal, a solution of the bichloride, "one part to two thousand, should be injected into the vagina, and followed by a five-grain suppository of iodoform."

Many of the above precautions it has been my custom to take, especially as regards my own person, while attending an obstetrical case, for the last few years. And wishing and hoping that Dr. Thomas is right in the propositions and conclusions laid down in his paper, still, I must say, although it is my belief that most of the diseases following parturition are due to the absorption of poison through lesions of the genital tract, I cannot help but think that there is another disease, peculiar to itself.

A zymotic, infectious disease, the exact nature of which is unknown, prevails at certain periods and in certain places, sometimes, seemingly, following in the track of the obstetrician, and

which no precaution seems to obviate, unless it be the removal of the physician from his practice for a time.

Such a disease it was my misfortune to meet with, in my practice, four years ago. In the short space of six weeks I met with seven puerperal fever cases, two ending fatally.

A five per cent. solution of carbolic acid (I did not, at that time, know of the virtues of corrosive sublimate as an antiseptic) was used faithfully, with a nail-brush, before each examination. Antiseptic baths, daily; new clothes from top to bottom; very few examinations by the bed-side. But still, one case followed another, not consecutively, but sometimes skipping over two or three, until, in desperation, I had my arm done up for a pretended colles fracture, by Dr. S. S. Greene and Dr. James Sloan then of this city, wishing to have an excuse to give up my obstetrical but retain my general practice. Three weeks elapsed. I was called to attend a woman in labor, who had been under anti-syphilitic treatment for the previous six months. She had had seven dead born children, and I had been watching the case with considerable interest.

Dr. Dorland was called on to help me, as some fear was expressed that I would not be able, under the circumstances, to manage the case. Up to the last, I was resolved not to make a vaginal examination, but as the Doctor was some time in arriving, and, as three weeks had gone by since my last case, I made up my mind to risk it, hoping, if there was any poison about my person, it had, by this time, passed away. The labor was a tedious one, but after a time, for good and sufficient reasons, the woman was delivered, with the forceps, of a living child, Dr. Dorland being kind enough to compliment me on the skillful way I had managed the case with a broken arm. (The Doctor, to this day, is not aware of the bogus fracture.)

Within twenty-four hours I was called to another confinement and within four days both women were sick with puerperal fever. My arm suddenly grew worse, and just as soon as possible I left Buffalo for the East and remained away five weeks.

While in a little town of New Hampshire, an incident occurred which made quite an impression on my mind at that time. While telling some of my friends the cause of my leaving Buffalo, they mentioned a doctor of that town who had, about ten years previous, very bad luck with his women, so much so that he was obliged to quit practice, and was then running a farm.

Perhaps the bad cases which it was my misfortune to see may have been coincidences. Perhaps one came from a particle of retained placenta or membranes, another from a neglected, lacerated perineum, or perhaps, a germ of one of the zymotic diseases was carried by myself or nurse.

But, no consideration could make me continue my obstetrical practice if four or five puerperal fever cases should follow, one shortly after another.

Now, turning the page, a more pleasant picture, at least for me, it is my wish to present before you. Until within about four months ago, covering a period of about two years, over three hundred confinement cases were under my supervision.

In spite of neglected, lacerated perineums, in spite of dirt and want of care, with the usual number of forceps and turning deliveries, and one case of turning especially (Dr. Walter Greene of this city being the consulting physician), in which the vaginal cul-de-sac was so badly torn that one hand could be passed into the abdomen back of the uterus, meeting the other hand on the outside, as in bi-manual palpation, seemingly nothing intervening but the skin; in spite of a want of precaution so much talked of, of late, unless the precaution of keeping my own person and instruments perfectly clean and using neither vaginal nor uterine injections only after manual deliveries, with the exception of one fatal case of embolism of the pulmonary artery, no one case has caused me an hour's uneasiness; nor can I recall a case in which the thermometer remained higher than 101° F. for forty-eight hours.

Four months ago one of my patients died with puerperal peritonitis; another, since our last meeting, with puerperal septicæmia. The history and treatment of this last case, with criticisms on my own want of success, will be given as the plan usually followed by me in treating this most fearful disease.

Mrs. F., primipara, 28 years of age, was delivered, March 22d, after a short labor, of a healthy child. Nothing occurred during labor worthy of remark, unless it were that a domestic trouble was worrying the mind of the patient. A slight laceration of the perineum was noticed after the birth of the placenta. It was a question whether or not this should be closed by suture, and the decision was not to do so, as the tear seemed to be of no moment.

Perhaps that was the first mistake. Nothing unusual happened unless it was a want of sleep, which was forced by chloral, until the third day, when, on making my morning call, I found my patient slightly delirious, with a temperature of 102° F., and a pulse of 110. Thinking and hoping it was the coming of the milk, the tr. of aconite and tablespoonful doses of liq. amon. acetatis was ordered to be given every hour. That was the second and grand mistake, as future events proved conclusively to my mind. On making my next visit, some twelve hours afterwards, found patient more delirious, with pulse of 130 and temperature of 104° F., with that peculiar, anxious and yellowish cast of countenance so characteristic of blood poisoning in the puerperal woman.

No chill had preceded as a warning, nor was there any cessation of the lochia, but every symptom pointed to a septicæmia of a severe type, and the cause became plainly evident when using an intra-uterine injection of the bichloride, one part to two thousand, a piece of the membranes, six or seven inches long, was washed from the womb. The injections were continued every three hours; quinine and salicylate of sodium were given to reduce temperature; chloral and hypodermic injections of morphia (there was no pain) to induce sleep. But in vain.

Twelve hours had been lost, and although the first cause had been removed, and the womb thoroughly washed, the poison had gained entrance into the general system and performed its deadly work, the patient dying on the eighth day from the hour of delivery.

As I look back now, I can easily point out three mistakes: Firstly, not removing the membranes entire, which, it seems to me, might happen to any one, and it does happen occasionally that part of the membranes and offensive pieces of the after-birth will remain some time after delivery without doing the slightest harm.

Why in one case such frightful results ensue, and in another not raise the pulse one beat, is about as easy to answer as to tell why one simple wound heals by first intention and another is followed by erysipelas. Secondly, in not closing the laceration of the perineum.

If at any time in my life I have taken the stand (and I have done so in one of our local societies) that nature would take care of most of the torn perineums (and many the one I have neglected with impunity) I have, at this present time, come to see the folly of my ways, and now I would go as far the other way and say that he who neglects to rectify, immediately, the ruptured perineum should be prosecuted for mal-practice. So easily done, and bringing, generally, such immediate good effects, saying nothing of the remote symptoms.

One stitch, so well described by Dr. Allway, of Toronto, is usually all that is necessary, with no trouble to the physician and no pain to the patient; but, on the contrary, almost immediate relief to that burning, smarting pain so often complained of, after labor, and which is generally produced by a tear of the perineum.

Thirdly, not using intra-uterine injections until twelve hours after the rise of temperature and quickening of the pulse.

This mistake, possibly, is not so easily to be avoided, for how often does the secretion of milk, or any other little disturbance,

bring up the thermometer or quicken the pulse, which subsides in twenty-four or forty-eight hours, under appropriate or without any treatment.

Of course, in any case, the result showed there was a grand mistake, and, without doubt, had the cause been attacked twelve hours sooner, my patient would be living to-day; and I would say, here, intra-uterine injections, repeated every three hours for forty-eight hours without a reduction in the temperature and improvement in the other symptoms, does more harm than good.

The "victorious army has gained entrance into the general system, and our washings simply bring away the rear guard."

On the other hand, if there be the slightest improvement, usually, by continuing the injections, success will be likely to be certain.

In conclusion, let me say that if I have not given the treatment of puerperal fever as a disease peculiar to itself, it is because I think the treatment which conquers the baneful effects produced by absorption of a poison through the injured genital tract will be just as likely, as far as it is known, to be successful in treating that disease, which undoubtedly prevails as an epidemic some years more than others, and which depends on some unknown cause, called puerperal fever.

SURGICAL DELUSIONS.

AN ABSTRACT OF THE ADDRESS IN SURGERY OF THE MEDICAL SOCIETY FOR THE STATE OF PENNSYLVANIA, FOR 1884.

BY JOHN B. ROBERTS, M. D.

Professor of Anatomy and Surgery in the Philadelphian Polyclinic.

Many surgical theories and procedures have become traditional, and are accepted as true and correct, merely because reverence for antiquity, or careless acceptance, has not questioned their right to be classed as surgical facts. The present age is an incredulous one, and demands accurate investigation

of all such claims. The field of investigation is large, for progress has been retarded by the influence of theorizing writers, with monochromatic vision, the example of non-seeing and non-looking devotees of the fetiches of surgical superstition and the convincing effect of a repetition of false statements. I shall select a few topics which have greatly interested me and concerning which I probably differ quite widely from many of you.

CHLOROFORM ANÆSTHESIA.

Many still cling to the delusion that chloroform is a safe anæsthetic, because they have never seen a patient die from it. Is one man's experience to weigh against the physiological, the experimental, the clinical experience of the whole world? Dare we employ chloroform, instead of ether, when recognized authorities state that in chloroform anæsthesia death occurs without warning in the hands of experienced administrators; when some five hundred deaths have already been reported; when Schiff and Dalton reject it in physiological laboratories, because of its mortality; when the scientific grants committee of the British Medical Association assert that chloroform is a more dangerous anæsthetic than ether.

Adherence to chloroform in the face of such facts is criminal when circumstances permit ether to be obtained. The assertion that it is often impossible to produce anæsthesia with ether is the result of inefficient methods of administration. Ether, if given as chloroform is and should be given, is, in truth, a useless anæsthetic, but given properly it is efficient.

VALUE OF STYPTICS.

The belief in the necessity of styptics is a delusion less dangerous than that first mentioned, but is given more extended credence. Such agents are seldom, probably never, needed in general surgery to arrest hemorrhage. When ligatures, torsion or acupressure is not demanded, and such is seldom the case unless the artery is as large as the facial, moderate, direct pres-

sure, applied in dressing the wound, is the only hemostatic required. Styptics often do harm, and, as they are not needed, they should be discarded.

FATALITY OF SMALL HEMORRHAGES.

There is much misapprehension about the quantity of blood that a healthy person may lose with impunity. Many who often look with equanimity upon a parturient woman losing a pint of blood from the uterine sinuses would be dismayed at a woman losing half or a quarter that amount during removal of a tumor. While not advocating needless waste of blood, and especially in patients suffering surgical shock, I assert that there is an unnecessary fear of blood spurting from a few insignificant vessels. The largest artery can be controlled by pressure not greater than is used for ringing the electric bell in your hotel. Hence there is always sufficient power in your fingers to obviate fatal hemorrhage until strings can be obtained and applied.

DANGER OF TREPHINING THE SKULL.

The dislike to make exploratory incisions in closed fractures of the skull evinced by some surgeons and the objection of others to trephining, and thus opening the diploic structure in open fractures, are delusions of a most disastrous tendency. To wait until symptoms of cerebral compression or inflammation have supervened is to lose the most favorable opportunity for mechanical relief. Such a Fabian policy is often followed by death. The treatment of open and of closed fractures of the skull should not be looked upon as very different, since, with the present improved methods of dressing wounds, the successful issue depends almost entirely upon the cerebral rather than the cranial phase of the injury. If such fractures as are usually seen in the skull were not in proximity to the brain, the surgeon would consider them almost trivial. The feature of closed fractures that renders them so troublesome is the obscurity that accompanies them. I have for a number of years strongly advocated making closed fractures open ones by means of an ex-

ploratory incision, whenever there is a suspicion of the existence of depression or splintering. In open fractures operation to elevate depressed portions and get rid of splinters of the inner table thrust into the membranes should be undertaken rather than avoided. It is better to err on the side of action than that of inaction. Careful manipulation and proper dressings at an early stage are sources of less risk than is incurred by the surgeon who leaves unseen and unsuspected fragments thrust into the membranes or brain.

OPERATIVE DELAY IN STRANGULATED HERNIA.

A delusion of fatal issue is that leading to postponement of operative interference in strangulated hernia. Repeated attempts at forcible taxis and medical pow-wow-ing with temporizing measures have ended more lives than the use of the knife. Herniotomy done within twelve hours is almost always followed by recovery. Death is to be expected, however, if strangulation has existed for two or three days, and the gut has been bruised by violent manipulation in the endeavor to relieve the contraction by taxis. Moderate taxis under ether, a half day's treatment with cold applications and the internal use of morphia, and a second moderate attempt at taxis, followed, if unsuccessful, by immediate operation, is the sequence to be followed in strangulated hernia. When symptoms of strangulated hernia exist, the slightest fullness and tenderness in one groin over either of the rings is a sufficient localizing indication to warrant operation.

OPERATIVE DELAY IN ACUTE PHLEGMONOUS INFLAMMATION.

No insane delusion, no Spanish inquisitor ever caused so many hours of excruciating physical torture as the hallucination that acute abscesses and furuncles must not be incised until pointing has occurred. All the world knows that evacuation of imprisoned pus in phlegmonous inflammations means instant relief of the agonizing pain; yet how few of the profession early and freely incise such inflamed tissues unless they first see the

yellow pus under the thinned skin or feel the fluctuation of the fluid in the abscess cavity. The pain is caused by the effort of the pus and sloughing tissue to escape. Is it not, then, more rational to make a free incision to-day than to wait till next week? Time and pain are both saved by early incision. If the cut is made before the pus has actually formed, so much the better.

Probably no form of abscess needs early and free incision more imperatively than that under the palmar fascia. Destructive burrowing of pus is prevented by this radical procedure, which also saves the patient many days of poultices and purgatory.

OPERATIVE DELAY IN MALIGNANT TUMORS.

Much bad surgery results from a delusive postponement of operative interference in malignant diseases. Instant removal is to be practiced in such cases provided the patient is deemed fit to stand the surgical shock.

NECESSARY FATALITY OF TRAUMATIC TETANUS.

That traumatic tetanus is of necessity fatal is a commonly held opinion. Proper treatment is sometimes neglected because of this belief in its hopelessness. That the prognosis is extremely unfavorable, I admit, but that cases of a severe type recover is undoubted. Chloral hydrate in full doses has given the best results; but I do not propose speaking of therapeutics at this time. I merely wish to impress upon the profession the fact that a fair number of cases of traumatic tetanus have recovered.

FATALITY OF PERICARDIAL AND CARDIAC WOUNDS.

The prevalent notion of the excessive danger of these wounds is delusional, at least in as far as it teaches that these structures will not brook surgical interference. The pericardial sac should be dealt with exactly as the pleural sac, by aspiration, incision, irrigation and drainage according to the lesion. That simple puncture or aspiration of the heart itself is not accompanied by the

expected risk to life has been pretty well shown, though I am not prepared to recommend its general adoption for trivial cardiac conditions.

SYMMETRY OF NORMAL LIMBS.

Another delusion still existing in many minds is that the extremities are usually of the same length. Clinical and anatomical investigation show that asymmetry in the length of normal limbs is of common occurrence. Therefore, measurements of the legs in cases of fracture are of little value, since it is impossible to know whether it is the femur of a long or a short leg that is the seat of injury.

USEFULNESS OF TREATING VICIOUS UNION OF FRACTURES.

It is a fact, not sufficiently appreciated, that many cases of deformity, from imperfectly treated fractures of long bones, can be remedied by refracture. Over and over again have I seen cases of grave disability and deformity cured by the application of sufficient force to break the callus uniting the misplaced fragments. Five to six months is not too late to resort to this expedient for correcting what, otherwise, must be a life-long evidence of defective surgical attendance.

There are many other prevalent surgical delusions, such as, that bony union of transverse fractures of the patella and of intracapsular fractures of the femoral neck cannot take place; that chronic purulent discharges from the ear do not need active treatment; that hypermetropia and hypermetropic astigmatism can be properly estimated and corrected, without paralyzing the accommodation; that it is improper to perforate the nasal septum in cases of great deviation; that crooked noses are not amenable to treatment; that corneal operations and cataract extractions should be treated by cotton padding and bandages to the eyes; that fractures should be treated with carved or manufactured splints.

While an earnest advocate of conservative and of reparative surgery, I believe that when operative surgery is demanded

it should be aggressive. Delay, indecision and insufficiency impair the value of much surgical work, and are often the legitimate result of a superstitious faith in delusive surgical dogmas

Clinical Reports.

THE DEAFNESS OF PREGNANCY AND THE POST PARTURIENT STATE —AN UNIQUE HISTORY.

BY FRANK DUDLEY BEANE. A. M., M. D., of New York City.

The literature of the deafness of pregnancy is not so replete with clinical records that the details of the following cases, which have fallen under my observation, will be likely to fail of interest.

Case 1.—Mrs. B., æt. 71 years, U. S., widow, the mother of thirteen children, had enjoyed perfect hearing power till after the birth of her seventh child, about forty-two years ago. Each labor had been normal and comparatively easy, and the lyings-in free from complications. After the above-mentioned birth, slowly progressive deafness made its appearance, unattended by pain, discharge or throat affection. After a short time tinnitus was added to the deafness, and became very pronounced. No constitutional or other known cause for the deafness, which has been profound for many years.

PRESENT CONDITION.

Aerial Conduction.—Acoumeter and tuning-fork = $\frac{1}{15}$ m. Voice, shouting in ears.

Bone Conduction.—Greatly diminished.

Membran. Tympan.—Both normal in color, lustre, "spot," position and movement, considering patient's age; slight congestion along mallei.

Eustachian Tubes.—Patent.

Naso-Pharynx.—Normal.

Case 2.—Mrs. E. W., æt. 52 years, U. S., widow, daughter of the preceding, never had otorrhœa, injury, or aural trouble till after marriage. Just after the birth of her second child, being then in her twenty-first year, deafness gradually appeared and slowly increased during a period extending over four or five years, and has remained stationary since, with, possibly, a very slight increase. Constant and marked tinnitus.

PRESENT CONDITION.

Aerial Conduction.—R. and L. Acoumeter, $\frac{1}{15}$ m. Voice (loud), $\frac{1}{15}$ m. Whisper, $\frac{1}{15}$ m. Tuning-fork, o.

Bone Conduction.—Acoumeter and fork, barely perceptible.

Membran. Tympan.—Both are normal in color, lustre (for her age), position and movement; malleus distinct and movable (Siegle) on either side.

Eustachian Tubes.—Unobstructed.

Naso-Pharynx.—Normal.

Her labors (in all eleven) were free from complications. No constitutional disease; no illness of any moment. Deafness not due to "colds" or "earaches."

Case 3.—Mrs. C. A., æt. 50 years, U. S., widow, sister to the preceding. No injury, otorrhœa or aural disease till after the birth of her first child, she then being twenty years old, when slight deafness in both ears was noticed. After each succeeding birth (seven in all) the deafness increased, till, after the last, it reached its maximum, its present degree. It has remained unchanged for the past sixteen years at least. Labors easy, and no sequelæ. Had occasional "colds in the head" but no "earaches." Tinnitus has been a prominent and most annoying symptom, as in the preceding cases.

PRESENT CONDITION.

Aerial Conduction.—Both ears: Acoumeter and whisper = $\frac{1}{15}$ m. Voice (loud) $\frac{1}{15}$ m. Tuning-fork = o.

Bone Conduction.—Very greatly diminished.

Membran. Tympan.—Both dull and non-transparent; considerable congestion at periphery and along the head and handle of the mallei; slight "spot" just below and in front of umbo on the left side; none on the right; free movement of the membrane and mallei on using Siegle's instrument.

Eustachian Tubes.—Obstructed, but rendered pervious by strong politzeration.

Naso-Pharynx.—Follicular hypertrophy and general thickening of the pharyngeal mucosa, but no catarrh.

The history of deafness in this family extends to one son (and brother) who is exceedingly deaf, the result of a chronic suppurative otitis media.

REMARKS.

Perhaps the most striking feature is the occurrence of this form of deafness in three members of a family and in regular descent. In each case there is marked involvement of the nerve of audition, though, strictly speaking, these cannot be called cases of "nervous deafness" pure and simple. Cases 1 and 2 more closely approach such a form, while Case 3 possesses a decided element of catarrh of the middle ear. Possibly if we could carefully examine the tympanum in the other cases, we might discover a partial ankylosis of the stapes to the margin of the fenestra ovalis, which would largely account for the symptoms. Such a discovery would then place all the cases in the category of otitis media catarrhalis sicca. Aural pathology is ever advancing; and, perhaps, it behooves us not too hastily to attribute to lesion of the labyrinth (in some of its phases) cases of deafness with apparent normal conducting apparatus. Drs Sexton and Burnett very carefully emphasized this point in their late estimate of the value of the tuning-fork in aural diagnosis.*

But little has been written upon the subject here under consideration. Many works upon otology refer to shock, sudden

* Paper and discussion before the Amer. Otol. Soc., July 17, 1883.

and large hemorrhages, severe mental emotion, pronounced general and nervous exhaustion, general and marked anæmia as causes of nervous deafness.

One of, if not the first, authorities to draw attention to the deafness of the post parturient state was William Wilde,[†] who said: "Many females have become deaf immediately after parturition. In such cases I have generally observed a speckled opacity of the membrane."

The next reference to the subject came from the pen of the learned Toynbee.[‡]

Though several times quoted, it is so pregnant with interest that it may not be amiss to incorporate it here:

"Mrs. B., aged 40, pale, and of a nervous temperament, consulted me in 1850 on account of complete deafness in both ears. She stated that she had married in India ten years previously, and at the time of her marriage she could hear perfectly well. On the occasion of her first confinement, previous to which her hearing was still perfect, she suffered a good deal from exhaustion, and this was followed by a great degree of deafness, so that she could scarcely hear what was said to her, even when the voice was raised. Upon getting up, and growing much stronger, the deafness was so much relieved that she merely required to be spoken to a little louder than usual. During each successive confinement in India, amounting in all to four, the deafness greatly increased, and after each recovery became more permanent, until, on the last occasion, she remained as deaf as at present, when she is obliged to have recourse to signs. Indeed, she has never heard the voice of her younger children, and can only by the movements of their lips understand their words."

Dr. Roosa[§] says: "Just how it is that pregnant women are so often affected by a proliferous inflammation of the middle ear, I am unable to say; but it is a fact, that many women have told

[†] Pract. Obser. on Aural Surgery, Phila., 1853, p. 275.

[‡] The Diseases of the Ear: Their Nature, Diagnosis and Treatment; London, 1860; p. 370.

[§] A Practical Treatise on Diseases of the Ear; New York, 1881, p. 286.

me that they traced their impairment of hearing to their first pregnancy, and that they became worse at the birth of each child."

Dr. W. W. Moreland, of Boston, has described two interesting cases in the *Trans. Amer. Otol. Soc.* for 1869, pp. 17, et. seq.

In the same "Transactions," for 1878, p. 180, Dr. Samuel Sexton reported: "Deafness during pregnancy, Dr. Pierce, of Manchester, thinks begins with that condition. Mr. Lennox Brown regards such cases as common, and believes they are not catarrhal, but a thickening of the mucous membrane. Sometimes they are nervous in character."

Buck* says: "In a few cases the loss of power of hearing takes place in a gradual manner, and without any attendant symptoms that might throw light on the cause of such loss. * * * In this category may be placed those cases of total loss of power of hearing, which are observed in women shortly after confinement."

Pomeroy† devotes a little more than one page to the subject, referring to Wilde, Toynbee and Sexton, as above quoted.

Politzer, in his most admirable treatise,‡ refers to the connection existing between aural diseases and affections of the unimpregnated uterus, but makes no mention of the deafness of gestation and parturition. Nor do Bonnafont,§ Von Trolstch,|| Turnbull,¶ Hinton,** Burnett,†† Jones,‡‡ or Miot,§§ devote any space to the affection.

The etiology of this disease is necessarily involved in much darkness, in those cases unattended by signs of middle ear inflammation, where the deafness slowly progresses and no throat

* *Diagnosis and Treatment of Ear Diseases*; New York, 1880 (Wood's Library) pp. 390-391.

† *The Diagnosis and Treatment of Diseases of the Ear*; New York, 1883 pp. 371 and 372.

‡ *A Text Book of the Diseases of the Ear*; Phila., 1833, p. 688.

§ *Traite des Maladies de l'Oreille*; Paris, 1860.

|| *A Treatise on Diseases of the Ear*; New York, 1869.

¶ *A Clinical Manual of Diseases of the Ear*; Phila., 1872.

** *The Questions of Aural Surgery*; London, 1874.

†† *The Ear: Its Anatomy, Physiol. and Diseases*; Phila., 1877.

‡‡ *Treatise on Aural Surgery*; London, Dublin, 1881.

§§ *Traite des Malad. de l'Oreille*; Paris, 1882.

or nasal complication exists. When it appears suddenly, is complete from the first or very rapidly becomes so, we are justified, in the present state of our knowledge, in considering the internal ear at fault.

Regarding treatment, the advice of Dr. Roosa should make a special impress upon the mind of the general practitioner: "I am now in the habit of warning such patients that great attention should be paid to their throat and ears, by means of gargles and Politzer's method, during the period of utero-gestation."

This treatment should be continued awhile after delivery, till every vestige of impairment of hearing has disappeared. Instead of Politzeration, the Valsavian method may be substituted. Cases which do not promptly improve under this treatment, with a proper care to the maintenance or recovery of general health, may often obtain relief and cure at the hands of the specialist. The prevention of undue hemorrhage at delivery, and measures toward securing a favorable lying-in and prompt recovery, may be important prophylactic factors.

Society Reports.

NEW YORK NEUROLOGICAL SOCIETY.

STATED MEETING, MARCH 4, 1884.

W. J. Morton, President, in the Chair.

First paper: Dr. C. L. Dana read a paper upon "Morbid Somnolence," relating a number of histories illustrating different forms of this affection. These forms are classified as follows:

1. Epileptoid sleeping states.
2. Hysteroid sleeping states, including (a) spontaneous or "mesmeric" sleep, (b) trance and lethargic states.

3. Morbid somnolence, the expression of a distinct neurosis (narcolepsy).

4. Unclassified forms.

The speaker's first case, illustrating Class 3, was that of a young man, of wealthy family and personal history, who would go to bed at the ordinary hour and could not be roused till noon, or afternoon or evening of the next day. This would continue for a week or two, when the symptoms would remit.

A second case, illustrating Class 2, was that of a young lady who had short attacks of catalepsy, cataleptic *petit mal*, alternating with sudden attacks of sleep. These came on several times daily.

Three other cases, illustrating Class 3, were of neurasthenic persons, who, for several months, had persistent drowsiness, not attributable to any nutritive or organic disorder.

Dr. Dana also reported a case furnished by Dr. L. Putzel, illustrating the epileptoid sleeping states.

DISCUSSION ON DR. DANA'S PAPER.

Dr. William M. Leszynsky: "I know of two cases which might be termed a mild form of morbid somnolence, where the patient would fall asleep at almost any hour of the day, while reading or conversing, the sleep lasting, at times, an hour or more. The cause of this somnolence seemed to me to be, undoubtedly, due to faulty assimilation of food, and was cured by the use of nitro-muriatic acid, etc."

Dr. Weber: "I have seen but a few cases. In diabetes morbid somnolence is believed to be a prominent symptom. I have seen twenty or thirty such cases, well pronounced, but have not seen one case where morbid somnolence prevailed; on the contrary, the patients did not sleep as much as normal. I remember two cases of locomotor ataxia, in which there was a great tendency to prolonged sleep. In one of these cases the man would sleep, often, fifteen hours at a time. I have observed

sopor in chronic endarteritis, in a number of cases, especially in cases where the condition of cerebral arteries tends to apoplexy. There was one man who would fall asleep during dinner, be taken up to bed, and there sleep till the next day."

Drs. Roberts and C. E. Nelson made remarks giving cases as to making up sleeping-time after prolonged vigil. Dr. Roberts remarked that sopor was met with in his case of myxoedema, read previously before this society, and published in this journal. In such cases sopor is recognized as a symptom of disease.

Dr. Shaw, of Brooklyn, related a case of a man who would fall asleep in the clinic.

Dr. R. B. Prescott said: "I have one case bearing on this subject, Mr. President, which came into mind while Dr. Dana was reading paper, and which, as it may not be altogether without interest, I will relate. It is that of a farmer, unmarried, forty years of age or more, living in a small village in Massachusetts, who, some ten years ago, began, without any apparent cause, to be troubled with excessive drowsiness. It manifested itself, first, in a disposition to sleep unseasonably long in the morning. He would remain in bed until long after the breakfast hour, and complain at intervals during the day of still feeling sleepy. Gradually he came to neglect the work of his farm, and remained about the house dozing away a considerable portion of the time. His social nature, too, underwent a decided change. He became reserved and silent. He shunned all intercourse with friends and acquaintances, was with difficulty made even to answer ordinary questions, and was easily moved to tears. On one occasion I was told that he fell asleep on his wagon while taking a load of produce to the nearest market town, and slept soundly for many hours, his horse having, of his own will, taken an unfrequented road and finally stopped at the place where he was discovered, the driver still fast asleep. His condition at present is that of a gradually deepening mental lethargy. He passes a large portion of his time in bed, and

takes little interest in what takes place around him, though at times he partially arouses and will read the newspapers or carry on a brief conversation, mainly in monosyllabic replies to questions. His bodily functions are all normal, and there is no evidence of any physical disease. His general health was good up to the time of the appearance of this morbid somnolency, and he is not the subject of any hereditary taint, so far as known. He is now regarded by those who know him as mildly insane, and his recovery is not expected."

The President said: "I have seen and treated but one of these very peculiar cases which I should be willing, following Dr. Dana's lines of diagnosis, to classify as true morbid somnolence. Of course, those who sleep after prolonged forced wakefulness do not fall within the author's categories. As an instance of simple sleep of this nature, I well remember of sleeping twenty-four hours without a moment of recollected consciousness, after two days and two nights in the saddle during a time of great danger. This may be said to be simply normal somnolence. The case of morbid somnolence I refer to was that of a physician in this city who had suffered from this condition for fifteen years. He was habitually overcome by an uncontrollable desire to sleep during the day-time, no matter how mal-apropos the time or place. This desire he would fight against with all his power of control, but would finally yield to sopor. Even in the dentist's chair, while a sensitive tooth was being scraped, he had fallen asleep. Often in the rounds of daily practice he would feel this lethargy creeping over him at critical moments, as, for instance, when his services were most needed at a confinement, and would be forced to yield to it and sleep. It was impossible, for the same reason, for him to read or study. In fact, life was becoming a soporific blank. Other symptoms were forgetfulness, frontal and occipital headache, a general malaise, great sense of weariness, palpitation of the heart on active exercise, and prostratic irritation. He had been examined,

time and time again, by friends of eminence in the medical profession for organic disease, and none existed. The urine, especially, had been the subject of careful tests. I repeated these examinations, with no better results. Malaria was out of the question. I treated this patient on the basis of a profound anæmia—gave him large and increasing doses of iron (Bland's pills) until he was taking thirty grains three times daily, gave him, additionally, glonoin. Under this treatment he improved wonderfully, and at his last visit, several months ago, he reported that he seldom fell asleep during the day."

Dr. Dana, in closing the discussion, gave a similar case to the English farmer. This case would have periods of remission for several years. These cases are supposed to end in insanity. There is persistent drowsiness in diabetes, and in syphilis; also, previous to attacks of epilepsy. There is recognized a "sleeping sickness" in Africa. The French authority, Ballet, mentions these conditions.

Second paper: "Treatment of Wry Neck by Sulphate of Atropia." By W. M. Leszynsky, M. D.

The reader related the history in the case of a young woman whose occupation being that of a book-folder she was obliged to turn her head very frequently toward the left side. The right sterno-cluilo-mastoid and trapezius muscles became affected with a very severe form of clinic spasm, which almost exhausted the strength of the patient. The treatment adopted was the daily injection of sulphate of atropia into the contracting muscles, beginning with gr. 1-80 and gradually increasing to gr. 1-6, which maximum dose was continued four days, when recovery supervened.

In addition to the atropia, galvanism was used, and the Faradic current was supplied to the opposite side.

DISCUSSION.

Dr. J. C. Shaw: "I have been called three times in consultation in these cases where atropine was used. There was a great

deal of pain, and marked neuropathic tendency. Insanity in the family, in one case. There is one difficulty in the treatment by atropine, that it sometimes causes disagreeable symptoms, especially in delicate women. In one case, where the drug was pushed, it caused such distress that the patient, a woman, refused to take it longer. Atropine, in large doses, cannot be used in all cases, therefore."

Dr. C. L. Dana said that Dr. Leszynsky was entitled to great credit, in applying atropia against such physiological odds. He believed that the cure was due to the employment of atropia. One point must be borne in mind, and that is that we must select our cases. In those cases where the disease is plainly neurosis, atropine may answer. In many cases, however, the disease appears to be of a perepheral and rheumatic character. Here anti-rheumatic remedies answer better.

Dr. Gibney: "In view of the fact that Dr. Leszynsky administered electricity and other agents, as his report shows, some doubt might be expressed as to the curative effects of the atropine injections. The relationship of cause and effect does not seem sharply enough defined. I have had no personal experience with this drug in torticollis. A few years ago, in a case of rotary spasm of the head, I had very prompt and excellent result in the use of the fluid extract of gelseminum, carried to tonic doses. Dr. Leszynsky certainly deserves credit for the heroic dosage of atropine in this case."

Dr. Birdsall related the history of a case of torticollis treated at the Manhattan Hospital by his assistant, Dr. Terriberry, in a child about eight years of age, by the application of as strong a galvanic current as could be endured, for from twenty to thirty minutes, on the affected muscles, three times a week, for several weeks, with gradual improvement, which finally terminated in complete recovery. Tincture of belladonna was administered in drop doses, until slight physiological effects were produced. Dr. Birdsall was inclined to credit the curative effect in this case

mainly to the galvanism, though he thought that a combination of the method with atropia and that of galvanism would, in general, be far more serviceable than either alone.

Dr. Weber: "Was a traumatic effect produced by the hypodermic injections?"

Dr. Leszynsky: "The injections were made into the substance of the muscle, and no traumatic effect was produced. The preparation of atropia used was Marck's, and the solution was freshly prepared every two or three days."

Remarks of Dr. David Webster: "Mr. President, I have listened to Dr. Leszynsky's paper with much interest. Although I have seen but few cases of wry neck, I have had a good deal of experience with atropine, and I beg leave to question whether the same results might not have been accomplished by smaller doses applied locally. For the purpose of relaxing the sphincta pupillæ and the ciliary muscle we never give atropia by the mouth or hypodermically, but always apply it locally, to the surface of the eyeball. Less than one twenty-thousandth of a grain applied to the conjunctiva will paralyze the muscles I have named, while it would require a many times larger dose to produce the same effect if given hypodermically. It is remarkable that Dr. Leszynsky's patient tolerated so large a dose as one-sixth of a grain. There is a wide difference in the quantity required to produce the physiological effects of the drug in different persons. I have frequently seen a drop of a four-grain solution, applied to the eye, produce the peculiar scarlet flushing of the face, especially in infants. I also know of a case in which a single drop in the eye caused marked delirium in a young lady, so that she had to be taken home in a carriage. I have had some personal experience with the physiological effects of atropia. I once swallowed what I supposed to be ten drops of Magendie's solution of morphia to check a diarrhœa while I went to Brooklyn to assist in an enucleation. On the way I noticed that I felt very strangely, going off into curious dreams,

entering into imaginary conversations, etc. When I got to the place of operation I found, on attempting to talk, that I could scarcely speak above a whisper, my mouth and throat were so dry. Dr. Agnew noticed that my face was flushed and my pupils dilated. I went home and went to bed, and slept soundly until the next morning. As soon as I awoke it dawned upon me that I must have taken atropine instead of morphine. As soon as I saw Dr. Agnew he told me he had arrived at the same conclusion. I found the atropine and morphine bottles side by side on my table. The mystery was explained. I once saw a case in the practice of a brother practitioner where one-sixteenth of a grain of sulphate of atropia, given with half a grain of morphia subcutaneously, produced delirium lasting for half a day or more. This was in a hysterical lady who was used to hypodermics of morphia without atropia. Dr. Leszynsky's method of giving the drug was a perfectly safe one, however, as he cautiously felt his way from smaller to larger doses."

Dr. G. W. Jacoby said: "It was not my intention to make any remarks upon this subject, as the objection which I intended to raise to the indiscriminate employment of galvanism and atropine in the treatment of Dr. L.'s case has already been made by some of the preceding speakers; but Dr. Gibney's remarks in reference to the facility of producing the physiological effects of atropine, in some cases, by very minute doses, recalls to my mind, very vividly, a case in which this was also very noticeable. The patient, a girl aged twelve years, came to me affected with a left-sided, tonic torticollis, probably of rheumatic origin. My results with electricity upon other cases having been unsatisfactory, I determined to treat this case by the hypodermic injection of sulphate of atropia. I therefore injected 1-50 of a grain of the drug. This one injection produced all the symptoms of atropine poisoning, ending in a violent delirium, which lasted for ten hours. When the patient had recovered from the effects of the atropine, I naturally felt reluctant to continue its

use, and began treatment of the torticollis by galvanism. After two weeks the child was discharged from treatment, entirely recovered. The points that I wish to mark are, firstly, the small amount of atropine necessary, in this case, to produce delirium and, secondly, a cure by self-limitation, or, possibly, through the action of the galvanic current. Had no ill effects resulted from the use of the atropia, I would probably have continued its use, and, my patient recovering, it would have been only natural to attribute this recovery to the use of the atropine. Therefore, we cannot be too cautious in drawing conclusions from a single case, no matter how well observed, and we should be very careful not to use two potent remedies, such as galvanism and atropine, simultaneously, as our scepticism in regard to the efficiency of either one will not be considered scientific proof of the beneficial action of the other."

Dr. Leszynsky, in closing the discussion, said:

"As Dr. Dana saw the patient referred to in my paper, I am pleased to hear that he agrees with me in stating that recovery was due to the employment of the atropia.

"In reporting the history of this case, I expected that the question would arise as to which of the remedies employed had effected the cure, therefore I was not surprised to hear the criticism of Drs. Gibney and Jacoby, and in reply I will state that the number of cells used in applying the galvanic current was from ten to twenty of a Stohrer portable battery. The patient could not tolerate a stronger application, and this was continued for nearly fifteen minutes daily. After the removal of the electrodes, I found that the spasm invariably became more vigorous than ever, and I always allowed about ten minutes to elapse before injecting the atropia.

"I would again direct the attention of the society to the fact that notwithstanding the daily application of galvanism in conjunction with the use of atropia, no improvement was shown until the twentieth day, soon after a rapid increase of the atropia from gr. 1-20 to nearly gr. $\frac{1}{2}$. Then the improvement became

so evident that it can hardly be doubted that the atropia was the important element which effected the successful result. In regard to the use of bromide of sodium, I can safely say that bromism was not produced. The faucial reflex was frequently tested and remained well marked throughout the entire course of treatment.

"Dr. Webster's suggestion may be a very good one if we accept it from an ophthalmological standpoint, but in this class of cases I cannot see what advantage could be gained by the injection of the oleate of atropia.

"The object in using this sulphate of atropia was to produce paralysis of trunk and branches of the spinal accessory nerve, therefore it was injected into the substance of the muscle for the purpose of producing its local effects on the motor nerve, although eminent authorities like Ringer and Traser have concluded, after an elaborate series of experiments upon living animals, that atropia paralyzes the motor nerves through its action upon the spinal cord, and not by its action through the circulation. I believe that the oleate, if applied locally, would produce more rapid constitutional symptoms on account of its speedy absorption, and another objection is that the dose cannot be so accurately determined.

"In conclusion, I will state that the patient remains well, and no sign nor symptom of spasm has since been shown."

Nomination of officers for ensuing year: President, Birdsall, Gray, Morton, W. A. Hammond; First Vice-President, C. L. Dana; Second Vice-President, G. W. Jacoby; Recording Secretary, E. C. Wendt; Corresponding Secretary, W. M. Leszynsky; Treasurer, E. C. Harwood; Counselors (five), Weber, Seguin, Jacoby, Morton, W. A. Hammond, McBride.

The society then adjourned.

THERAPEUTIC MEANS OF AFFECTING LOCAL INFLAMMATORY PROCESSES.

Dr. C. B. Nancrede concludes (*Medical News*), as a result of his investigations on this subject: 1. During the stage of dilated arteries, with increased rapidity of the current, but little danger of capillary changes with exudation need be apprehended, and here perhaps ergot, certainly arterial sedatives, do good, either directly or indirectly, without blood-letting, by reducing the size and rapidity of the current, thus allowing the veins of the irritated area time to empty themselves, even of an unaccustomed amount of blood. Thus, if vascular-pressure changes have taken place, the vessels have an opportunity to return to the normal. 2. After stasis has occurred, or while it is occurring, weakening of the heart's action and a diminished volume of the current—*e. g.*, the effect of arterial sedatives—can do nothing but harm to the inflamed area, although it may prevent extension of inflammation in the circumjacent parts, which are merely in the earlier stages of congestion. 3. The results to be sought and which are secured by local blood-letting are removal of the blood on the venous side, to that the vessels cannot only empty themselves, but a certain amount of *vis-a-fronte*, *i. e.*, aspiration—is invoked; this secondarily results not only in a temporary return to the normal on the arterial side, but an increased rapidity (and here is an important point)—lessened force of the circulation. The acceleration of rate without the weakened force of the circulation would further damage the vessels, instead of which the increased rate of the current merely serves to sweep out the accumulated red-blood cells, the cause of the excess of oxygen, and the consequent cell-migration. The vehement current also induces a rapid resorption of the effused liquor sanguinis, at once the stimulator to growth, and the food of the cells. This latter advantage is not founded on theory alone, for it is a matter of common observation that the mere amount of blood extracted produces no sensible effects on an

inflamed breast, for instance, at first, but in a few hours, the skin, if carefully examined, has become wrinkled, and the organ shrunk. This effect is secondary to the loss of blood, and chiefly results from the absorption of the inflammatory exudate. 4. Arterial sedatives in the latter stages are usually inadmissible except as succedanea to blood-letting, as far as the focus of inflammation is concerned; the surrounding parts, which are merely congested, may be benefited by their exhibition. After blood-letting they act favorably, because, when the stasis has been overcome, they lessen intra-vascular pressure, and thus permit the blood-vessels to recover their normal condition. They also alleviate pain by lessening the bulk of blood in the part—*i. e.*, they relieve nerve pressure.

PICRIC ACID AS A TEST FOR ALBUMEN.

The use of a saturated solution of picric acid as a test for albumen in the urine is a method which has recently been proposed; and although at first accepted as infallible by reason of its extreme delicacy, later investigations have shown that there are exceptions, and that it cannot always be depended upon. Some of these exceptions may be noted briefly as follows:

1st. If a patient whose urine is to be examined has been under the influence of quinine during the twenty-four hours preceding, the presence of a small quantity picric acid will produce at once a copious opalescent ring, which, on the application of heat, will be cleared up; but the application of heat or nitric acid will not produce coagulum. This shows, then, that the alkaloid quinine is eliminated through the kidneys, and the further proof, if any be needed, is found in the fact that picric acid, when placed in a solution of quinine, will produce the same effect as it does when the quinine is supposed to be in the urine.

2d. The presence of peptones in the urine, when the picric acid is added, will cause a precipitate. It has been shown by Gerhardt that peptones frequently appear in urine free of albumen, either as a forerunner or consequence of ordinary albuminuria, and Senator declares that peptones in slight quantities exist in every albuminous urine.

3d. An excess of albumen dissolves the precipitate formed by picric acid, and thus the examiner may be misled. It is therefore necessary to agitate the contents of the test-tube when a coagulum is formed by the addition of picric acid, in order to determine whether or not it will be dissolved.

4th. The presence of potassium salts in the urine will cause a precipitate.

5th. Still another possible cause of error is the presence in the urine of an excess of urates; but when this is the case, the reaction does not occur for some minutes. In regard to the latter, it should be noted that there is a difference between this reaction and that which occurs when albumen is present; that of the former, when closely examined, will be found to be made up of small crystals, which disappear on the application of heat, while the albumen reaction is granular, and, as a matter of course, is increased by the application of heat.

There is no question but that the use of picric acid is an exceedingly delicate test, but unless the possibilities of error are first eliminated, it will certainly prove, in many instances, misleading. Used as a means of confirming the diagnostic *after* the determination of the reaction, and the presence of the albumen by heat and nitric acid, it may prove valuable, but as a decisive test it is uncertain.—*Medical Bulletin*.

ANALYSIS OF BEEF PEPTONIDS.

Following is a report on Beef Peptonoids by Prof. John Attfield, F. R. S., F. I. C., etc., author of "A Manual on Chemistry, General, Medical and Pharmaceutical."

"The chemical examination to which I have submitted your Beef Peptonoids yields the following results in 100 parts—

Albuminoids (containing nitrogen 10.94),	-	69.25
Fat,	-	10.71
Sugar, including a trace of starch,	-	9.50
Phosphates, equal to bone phosphate,	-	3.01
Other mineral substances,	-	2.61
Moisture,	-	4.92

100.00

"The manufacturers of Beef Peptonoids state that this food is composed of dry, lean beef, one-third; the solids of milk, minus most of the fat, one-third; the gluten of wheat, one-third; the beef being partially digested or "peptonized." My analysis fully supports this statement, for I find present between 69 and 70 per cent. of albuminoids, that is, flesh-forming material (nitrogen 10.94); more than 20 per cent. of warmth-producing substance, nearly half of which is milk sugar, and rather more than half fat; three per cent. of bone-forming phosphates; about two per cent. of other normal mineral matter, and about five per cent. of moisture. A sample of the constituent gluten submitted to me was practically pure, containing a mere trace of starch. Rather more than one-fourth of the albuminoids, probably the "peptonized" portion, was soluble; while practically the whole of the Beef Peptonoids was readily soluble in peptonizing fluids, showing that it is easily and wholly digested when taken into the stomach. The flavor and odor of the preparation are excellent; its thorough state of dryness fits it for keeping any length of time in any climate. It is by far the most nutritious and concentrated food I have ever met with. Indeed, a palatable and assimilable and in every way acceptable article of food, containing nearly 70 per cent. of truly nutritive nitrogenous material partially peptonized has never before, to my knowledge, been offered to the medical profession or to the public."

LONDON, Nov. 18, 1883.

JOHN ATTFIELD.

CAUSES OF ERROR IN REPORTS RELATIVE TO THE PHYSICAL
EVIDENCE OF ASSAULT ON YOUNG GIRLS.

Prof. Brouardel (*Annales de Gynecologie*), says in referring to this matter: "A young girl may be troubled with vulvitis accompanied by a more or less abundant discharge. Her mother, naturally troubled about it, will question the girl closely and as it often happens will really, by her questions, suggest a kind of story which the imagination of the girl seizes upon and finally believes to be her own, though it may really have no foundation in fact. The incidents are connected perhaps with some boy or man who has been more or less in the company of the child, and thus there sometimes arises a false accusation which may have serious consequences. Hence the exact physiology of the female genital organs in their first conditions, together with such modifications in their general aspects as are most frequently found, should be thoroughly known to the practitioner if he would avoid very important errors. Three of the principal forms of hymen are susceptible of false interpretations. First is the circular hymen, in whose surrounding parts there exist in many cases certain folds which, upon a too rapid or cursory examination, might easily be taken for ridges, or cicatrices caused by previous ruptures. In holding the membrane tense, however, it will be observed that in cases where the membrane has remained entire, the tissue is continuous in appearance. The same hymens will often, owing to their elasticity and feeble resistive power, permit the entrance of the penis without rupturing at all. Then there is the hymen in form of a cross, and having two of its branches, at their extremities, attached to perfectly normal notches—so to speak—one at each side of the vagina. Care should be used not to mistake these bases of attachment for accidental ruptures. For the third form I will say that in certain cases the hymen, instead of constituting a continuous membrane perforated by two holes, presents the aspect of having originally been so constituted, while its appearance at the time of examination is that

of two orifices incompletely separated by a loose fluctuating (*flottante*) membrane. This aspect is also not unlikely to create a false impression that there has been a rupture. The examination of the hymen may be rendered very difficult by the development of fatty tissue in the labiæ majoræ. In such cases the vulva becomes more deeply situated, and it is only in the centre of a sort of vulvular canal that the hymeneal membrane is found. One important fact should always be present in the mind of the expert. I refer to the possible cicatrization of the wound produced by the rupture of the hymen. There is in these cases only a sort of momentary defloration; an attentive examination will reveal a cicatrice upon the membrane in question and enable the expert to avoid an error in diagnosis. The vulva may be the seat of inflammations of a diverse nature, and also of ulcerations, two accidental conditions which may be developed together or separately. Inflammation, or vulvitis, may be found in three types, which may be described as strumous, traumatic, and blennorrhagic. Between these three inflammatory characteristics a clear differential diagnosis is difficult to establish. The physician can only pronounce upon them after several examinations. Strumous vulvitis takes on chronic appearances, but is capable of presenting acute exacerbations. Traumatic vulvitis, whatever may be the source of injury, declares itself three or four days after the action of the cause; its duration averages about fifteen days. In blennorrhagic vulvitis there is a period of incubation of about eight days. The inflammation is intense, accompanied by a burning heat of the vulva, and finally, the urethra is invaded, which is not the case—or very exceptionally so—in other forms of vulvitis. The lymphatic ganglia and vulvo-vaginal glands furnish but weak elements for diagnosis; their tumefaction is proportioned to the intensity of the vulvitis, but gives little evidence as to its nature. The varieties of ulceration which may develop upon the vulva are many, some of a simple, and others of a venereal nature. Hard chancres, mucous patches and soft chancres belong to the latter

category. Herpes, ulcerations due to a simple aphthous vulvitis, corrosive or diphtheritic, to the former. The elements of diagnosis are multiple, but unfortunately are uncertain. The "knowing how to wait" (*savoir attendre*), upon which M. Fournier insists with such good reason, is here of the highest importance. How many physicians have caused a condemnation of the innocent by pronouncing their opinion too quickly. M. Brouardel reports, among others, two interesting cases where errors have been made in these cases. In the first it was a question of aphthous vulvitis, complicated with gangrene, which was mistaken for violence exercised upon the genital organs. The second was a diphtheritic vulvitis in complication with laryngo-tracheal diphtheria in which a similar etiology had been falsely pronounced."—*Bulletin Gen. de Therap.*

PESSARIES.

Undoubtedly a woman wearing a pessary should not be sent away ignorant of its presence, and without any directions. She should, therefore, be informed that such an instrument has been inserted, and she should be given certain directions. Thus, it is advisable at once to tell her that it is well to wash out the vagina once or twice a day with simple water, which will prevent secretions from accumulating, decomposing, and causing an unpleasant smell (which in some cases is bad enough to suggest the presence of cancer); she should also be told that soreness, itching, or profuse discharge, indicates that the pessary should be seen to, and, generally, that it should not be worn without being seen to three or four times a year.

It is also usually advisable that the doctor should satisfy himself in a week or so that the pessary is doing good, and doing no harm, and then, having once started the treatment, the patient should be left to test its efficacy. Now this test implies the removal of some symptoms or symptom, which may justly be attributed to some former morbid condition, and it also implies

the locomotion of the patient. Generally speaking, a patient lying down is better without a pessary, whatever displacement is present; thus it is rare for even complete procidentia not to reduce itself, or become much smaller, when the patient lies down, and the symptoms of partial descent, which (if there are any symptoms at all) will include almost certainly a sense of weight and dragging pain in one or other iliac fossa, will disappear or become greatly diminished in recumbent position. A pain which is better when the patient is standing and worse when she is lying should be regarded with suspicion if supposed to be due to descent or displacement; it is probably nothing of the kind. Thus it is to relieve pains by standing that pessaries are most generally useful. If this is not effected, the uterus may be unquestionably in the "normal" position, but the pessary is useless, and if useless, injurious. Thus the proper use of pessaries is—first, in most cases after the insertion of the pessary to get the patient on her legs; secondly, to satisfy oneself in a few days that it is doing good and is doing no harm; but as soon as both these objects are attained to, send the patient away with the above directions. It should not be the task of months to fit a woman with a pessary any more than with a truss. The following are not instances of the proper use of pessaries: To keep the patient in bed for long periods, wearing a pessary; to see her every day, every other day, twice a week for weeks, months, or years. Perhaps such visits are not made to the patient but to the pessary. However that may be, it is not the pessary but the patient who has to pay. What should we say of a surgeon who called for months to see a patient to whom he had given a wooden leg or a truss, and who kept him in bed for long periods, or an oculist who had fitted a patient with spectacles and saw him every day for months whether the spectacles seemed to suit him or not? It is true that the pessary is a truss in the dark, but that is no reason why the management of a pessary should be a deed of darkness. Recent investigations have shown that

the whole question of displacements has to be reconsidered.

It cannot be too widely or too dogmatically stated that prolonged treatment by pessaries, such as we have described, is quite inadmissible and unnecessary, injurious not only to the patient—i. e., to her *morale* as well as her purse—but also in the best sense to the practitioner, and if to the patient and practitioner, then to the public and the profession. It should also be realized that a pessary is a mere form of truss, and that its operations, though removed from the general view, are not occult. Ill-treatment bids fair to bring this useful form of truss into disrepute, and we are daily expecting to meet the practitioner whose sensitiveness is such that he shrinks from a cure whose name he has learnt to mistrust and dislike, but we feel bound to say we have not come across him yet.—*London Lancet*.

KAIRIN.

The *Lancet*, April 14, 1883, says that Filehne, in a recent number of the *Berliner Klinische Wochenschrift*, calls attention to the value of derivatives of chinolin which he, with Fisher and Konig, has found of great value as an anti-pyretic. These are kairin, kairolin, and finally chinolinæ hydrate of Wishegradsky. Of these, kairin seems most likely to be of permanent value as an anti-pyretic. The muriate of kairin is a crystalline, clear, grayish-yellow powder, soluble in water, having a bitter, saltish, aromatic taste, which is disagreeable to some patients, and is, therefore, given in wafers, with a subsequent drink of water. Filehne gives five to seven grains every hour or hour and a half. The remedy has shown a marked control over the temperature of croupous pneumonia. The urine, when kairin is being given, becomes dark green.

Correspondence.

Editors Buffalo Medical and Surgical Journal:

GENTLEMEN—In the May number of the JOURNAL, in the report of the proceedings of the meeting of the Erie County Medical Society, a statement appears that Dr. Storck disclaimed that the Board of Censors had anything to do with publishing the article *embracing* the legal opinion of Rogers, Locke & Milburn, which appeared in the *Express* of April 5th. This report is not correct, it should read *prefacing* the legal report. The Board of Censors, all the members present except Dr. Briggs, agreed to have the legal opinion of said law firm published, as the bill in question was then pending before the State Senate. The Board, however, furnished no comments.

An editorial also on the same subject, signed T. L., congratulates the medical profession in this county that two of the five members of the Board of Censors declined to sign the report; this is also incorrect. All the members of the Board were unanimous in the action taken, and agreed to the report as read before the society, except Dr. Briggs, who never met with the Board.

Have the kindness to make these corrections, and oblige,

Yours respectfully,

E. STORCK.

BUFFALO, May 21, 1884.

Editorial.

FUNCTIONAL AND STRUCTURAL DISEASES.

Reynolds, in the introduction to his "System of Medicine," under the heading, "Structural and Functional Diseases," after saying that these two phases have passed into common usage,

adds, further: "Recently it has become somewhat the fashion to object to the latter and to deny the existence of any such condition." At a recent meeting of the Medical Club a discussion occurred upon this question, in which a minority of the members, including the writer, argued the affirmative. At that time the article referred to above had not been read by the writer, the opinion being based upon individual reasoning in general, and especially upon thoughts suggested by a late study of the introductory chapters of Foster's Physiology. From this work we quote the following:

"Among the simpler organisms known to biologists, perhaps the most simple as well as the most common is that which has received the name of *amœba*. There are many varieties of *amœba*, and probably many of the forms which have been described are, in reality, merely *amœbiform* phases in the lives of certain animals or plants, but they all possess the same general characters. Closely resembling the white corpuscles of vertebrate blood, they are wholly or almost wholly composed of undifferentiated protoplasm, in the midst of which lies a nucleus, though this is sometimes absent. In many a distinction may be observed between a more solid external layer or *ectosarc*, and a more fluid granular interior or *endosarc*, but in others even this primary differentiation is wanting. By means of a continually occurring flux of its protoplasmic substance, the *amœba* is enabled, from moment to moment, not only to change its form but also to shift its position. By flowing round the substances which it meets, it, in a way, swallows them, and having digested and absorbed such parts as are suitable for food, ejects or rather flows away from the useless remnants. It thus lives, moves, eats, grows, and after a time dies, having been, during its whole life, hardly anything more than a minute lump of protoplasm. Hence, to the physiologist it is of the greatest interest, since in its life the problems of physiology are reduced to their simplest forms.

"Now, the study of an *amœba*, with the help of knowledge gained by the examination of more complex bodies, enables us to state that the undifferentiated protoplasm of which its body is so largely composed possesses certain fundamental vital properties.

"It is irritable and automatic When any disturbance, such as contact with a foreign body, is brought to bear on the amœba at rest, movements result. These are not passive movements, the effects of the push or pull of the disturbing body, proportionate to the force employed to cause them, but active manifestations of the contractility of the protoplasm; that is to say, the disturbing cause or 'stimulus' sets free a certain amount of energy previously latent in the protoplasm, and the energy set free takes on the form of movement. Any living matter which, when acted on by a stimulus, thus suffers an explosion of energy, is said to be 'irritable.' The irritability may, as in the amœba, lead to movement; but in some cases no movement follows the application of the stimulus to irritable matter, the energy set free by the explosion taking on some other form than movement, *ex. gr.*, heat. Thus a substance may be irritable and yet not contractile, though contractility is a very common manifestation of irritability.

"The amœba (except in its prolonged quiescent stage) is rarely at rest. It is almost continually in motion. The movements cannot always be referred to changes in surrounding circumstances acting as stimuli; in many cases the energy is set free in consequence of internal changes, and the movements which result are called spontaneous or automatic movements. We may, therefore, speak of the protoplasm of the amœba as being irritable and automatic.

"The energy expended in the movements of the amœba is supplied by the chemical changes going on in the protoplasm, by the breaking up of bodies possessing much latent energy into bodies possessing less. Thus the metabolic changes which the food (as distinguished from the undigested stuff mechanically lodged for awhile in the body) undergoes in passing through the protoplasm of the amœba are of three classes: Those preparatory to and culminating in the conversion of the food into protoplasm, those concerned in the discharge of energy, and those tending to economize the immediate products of the second class of changes by rendering them more or less useful in carrying out the first."

In a note, the author explains his meaning as follows :

"This word automatic has recently acquired a meaning almost exactly opposite to that which it originally bore, and an automatic action is now, by many, understood to mean nothing more than an action produced by some machinery or other. In this work I use it in the older sense, as denoting an action of a body, the causes of which appear to lie in the body itself. It seems preferable to 'spontaneous,' inasmuch as it does not necessarily carry with it the idea of irregularity, and bears no reference to a 'will.' "

One of the prominent theories regarding the nature of epilepsy is that the latent energy above referred to is set free and perhaps developed, with abnormal energy and frequency. If an amœba, composed of structureless protoplasm can set free the latent energy stored up in its substance, the difference in its susceptibility to external irritation must be one of function, for structural changes surely cannot occur where structure is absent. This was the line of argument maintained at the meeting referred to. It will be noticed that supposed changes in molecular arrangement (a pure working hypothesis, as yet) are not admitted as change in structure. Upon this point the views of Reynolds are right to the point, and we conclude this article with quotations from this clear thinking author. The reasons which have led him to retain the term "functional diseases," in his "System of Medicine," he gives as follows :

"For this purpose three classes of facts have to be remembered: 1st. That there are some structural alterations, such, for example, as atheroma in the vessels, which may, if an individual has been killed by an accident, be found extensively distributed throughout the body, the existence of which had been neither known nor suspected by the presentation of any functional change, or symptom, during life. On the other hand, a man may have suffered for many years from discomfort, or marked derangement of the functions of the brain, heart, or lungs and yet the most practiced anatomist, with all means and appliances to help him, may fail to discover, post mortem, any organic change which is sufficient to have accounted for them. 2d. Another class of facts, constantly lost

sight of by those who deny the existence of functional disease, is to be found in the relations between structure and function in health. At the end of a day's work, and after a night's repose, we might find the two extreme conditions of the organism as regards function. For twelve hours every muscle, nerve and organ has been doing its utmost, and, as we know, has been wearing out. During the hours of sleep, many organs have been doing little, and some nothing, whereas others have, as it seems, to work on without repose; but in all, repair has been going on. By an examination of the body, killed suddenly at the end of one or the other of these periods, it might be possible to infer which had been the condition immediately preceding death. But this inference would be based upon the relation exhibited between the products of functional activity, such as the nature, quantity and quality of the secretions in their several receptacles; and the raw materials upon which the organs have to work, such as the nature, quantity and quality of the chyle, lymph and blood. It would not be formed upon regard directed only to the condition of organs which had been either in activity or repose. It could not be so based, because the process of repair in the living, healthy body is one that is simultaneous and commensurate with waste. The muscles are not mended up as we mend a damaged wall, by patching up a hole here, and binding on an iron brace or girder yonder; but the process is interstitial; new material is brought in, and brought everywhere; the existing organ is worn down, and the waste matter is carried away; but, with all this change, there is a persistent textural result. Looking at this question still more closely, we see that function is related to structure, not only in the sense that it is what the organ does, but in the much more important meaning that it is at once the expression of the wear and also of the repair of tissues; or, in other words, the outcome of their life. In the present state of physiology, it is impossible to conceive of a living organ without believing in the nutritive, molecular changes it is undergoing, and these are the essential conditions of its functional activity; it is equally impossible to imagine the function of any living tissue being called into exercise without recognizing the dependence of this functional operation upon interstitial movements of repair and waste. But we

should be wrong, on the other side, were we to confound function with the nutritive changes which constitute, not the function itself, but the conditions of its exercise. It is, for example, the peculiar function of a muscle to shorten itself, of a nerve to convey an impulse either of motion or sensation, and of a nerve-center to convert one of these impulses into the other; the organs referred to, in exercising these functions, undergo certain nutrition-changes; but these molecular changes are not the functions of the organs, but the conditions essential for their performance. This principle, which it seems almost unnecessary to state, in regard of the particular organs or tissues now referred to, is, however, not unfrequently lost sight of in respect of secreting organs. It is the function of the salivary gland to secrete a fluid having special characters; of the liver to do this, and to effect changes in the blood which comes to it; and so of other secreting organs; they receive blood into them, and from all of them it passes away, changed, and the organ, as part product of this change, gives up its secreted matter. These functions, be it observed, depend for their performance upon nutrition-changes in the cells and tissues of the organs; but those fine processes of change are the conditions of functional activity, and are not to be confounded with the thing itself. The secreting cell has to live, to waste, and be repaired; and it lives at a degree of pressure, and is wasted and repaired at a rate, directly proportioned to the amount of work that it accomplishes, and thus it is conditioned precisely as are the ultimate elements of the muscle or the nerve. But minute as is our knowledge of much that goes on in the secreting organs, and of the chemical nature of the results or products of their work, we know no more of the physical conditions which determine that one set of cells shall separate urea, another set saliva, and a third bile acids from the blood, than we do of those which enable one nerve-fibre to convey impressions of light, another of sound, and another those of motion. These are, at present, ultimate facts of physiological science; the function is the expression of the life of the structure; it is what the latter was constructed for the purpose of doing; in doing it, the structure undergoes change; it is wasted and repaired, but these processes are carried on without any breach in the integrity of tissue. Func-

tion is to nutrition as electricity is to the chemic changes in the galvanic battery, a "correlated force." We do not say that the one is the other, but that it is converted into it, and, as in the inorganic world, the arrangement and nature of the particular materials with which different forces come into contact, determine whether chemic action shall appear as heat or magnetism, whether heat shall be shown in motion, light, or electricity, so do the different materials of the living organs, and their arrangement, determine the nature of the functions they perform; how they do this, we do not know, but the facts of physiological science are well known, viz., that the nerve-cell exhibits one class of powers, the muscular cell another class, and the secreting organs a third. 3d. A third class of facts to be remembered is, that in many diseases the only symptoms to be recognized are changes in the degree of activity with which certain organs perform their functions. No new element is introduced by some diseases into the category of vital actions. Such affections as chorea, hysteria, epilepsy, might be shown to consist of mere modifications in the degree, time of occurrence, and combinations of functions, each of which, taken *per se*, is consistent with health. The sudden loss of consciousness in epilepsy, for example, is not more mysterious than is the sudden but every-day recurring passage from wakefulness to sleep; the arrested respiration is similar in kind to that seen when the chest is fixed in the performance of any great muscular exertion involving the upper limbs; and still more similar to that which can scarcely be called morbid, the prolonged apnœa of a screaming child, whether the scream be the expression of terror, temper, or pain; the convulsive movements are neither more nor less than nerve and muscular functions, any of which might separately, and many of which might in combination, be the expression of healthy vital activity.

"From these three classes of facts, therefore, we are compelled to admit that, in the present state of science, the *onus probandi* lies with those who assert the constant presence of structural in association with functional change; and we affirm that those who make the assertion have never proved their point. Further, that as a matter of inference from what we know of the relation subsisting between structure and function in health, we should not even expect

to find solutions of continuity or coarse changes of texture in those diseases, the essential elements of which are functions altered, not in kind, but only in degree and mode of association; and that, on the other hand, when we do find material changes in association with functional disturbances, we should refer many of the latter only indirectly to what we see of the former, the more numerous and more important of them being dependent upon what we do not see, viz, the finer changes in the interstitial processes of nutrition. A scirrhus tumor of the stomach, for example, may produce certain symptoms easily explicable by its mechanical effects; it may be so situated as to prevent the ingress or egress of food; but vomiting may occur when the orifices are free, or when the tumor is situated in some organ in the pelvis; the supposed tumor may cut off the supply of food, and so explain some of the changes we see in color and general nutrition; but, on the other hand, the extreme of wasting and of cancerous tinting may be seen when there is no such enforced abstinence from food, but when indeed a large quantity is not only taken, but is digested and enjoyed. So again, a clot, of blood in the corpus striatum may sever the nerve-fibres, and so explain the servance between the will and certain muscles of the extremities; but it will not so explain the presence of convulsions, or of spasm in those palsied limbs.

“For these reasons we retain the words ‘functional disease,’ understanding by them such changes as have no recognized morbid anatomy, but such as depend upon corresponding changes in the finer processes of nutrition. We do not believe that there is any altered function without a correlated change in the nutrition of the organ; but what we assert is that such a change, as a matter of fact, is of such kind as to be undiscoverable by our senses, and as a matter of inference, from what we know of the relation between nutrition and function, is of such nature that it may always be beyond the reach of observation. No healthy function is performed without nutrition-change; no morbid function can exist without altered nutrition-change; but the relation between the two elements, ‘structure’ and ‘function,’ is the same in the two conditions.

"Nothing is more erroneous than the common notion that 'functional' means trivial, and that 'structural' means severe. Many diseases, designated by the former word, are long-continued, obstinate, or destructive; many known by the latter are of short duration, are amenable to treatment, or are harmless. Diseases which spoil or shorten life are not trivial because they depend upon such fine changes as may escape our observation; but they are the more serious when they thus elude our notice, just because they have their place in the very centre—the most ultimate process and fact—of life, the conduct of nutrition."

The views above expressed are exactly our own, and we invite criticism of them from those who may have dissenting opinions to offer.

EDITORIAL NOTES.

INSANITY.—A number of months since an editorial on Insanity appeared in this journal. The views expressed, we have reason to believe, were somewhat heterodox. An assistant physician on the staff of a State insane asylum, in commenting upon the argument, remarked that it contained some truth mixed with a great deal of error. Before accepting this rather dogmatic opinion, we invite the physician in question, or some other member of the profession, to prove his assertion.

ATTENTION has recently been called to the value of oil of wintergreen in acute rheumatism. As it is mainly a methyl salicylate, it is reasonable to expect better results from it than from other salicylates of a more fixed character. The objection to its use has been the difficulty of administration. This objection is entirely overcome by the use of the oil in capsules. The well-known and reliable house of Planten & Son now prepare them in two sizes, five and ten minims each.

DR. PARK RITCHIE, of St. Paul, states: "Am prescribing Tongaline with satisfactory results. For the indefinite aches and pains of nervous patients it is superior to any other anodyne. For nervous headache it is almost a specific." Dr. C. H. Hughes, of St. Louis, states: "Have found Tongaline a useful combination in

rheumatic neuralgia." Dr. T. L. Bell, of Louisville, states: "Have used Tongaline in neuralgic affections, many of them of a severe form, with the most gratifying results."

DR. J. K. BAUDUY, Prof. of Nervous and Mental Diseases, Missouri Medical College, says: "After a thorough and continued trial of Bromidia at St. Vincent's Asylum, I can cheerfully certify to its great therapeutic value and purity. Its effects are much more rapid and efficient than the ordinary chloral mixtures. The sisters in charge of the wards, after using the Bromidia and comparing its effects with the ordinary chloral mixtures used so long as a hypnotic, claim great superiority for the former. Its success has been tested where the other, in similar doses, has failed. The purity of the chloral and the extracts of cannabis indica and the hyoscyamus which it contains, together with the small doses of the remedy which are required, make it almost invaluable to medical practitioners, who are guaranteed a pure and efficacious remedy in the use of Bromidia. They are not left at the mercy of pharmacists, who sometimes dispense inferior if not adulterated preparations of chloral. We could not, for some time, be induced to try the remedy, entertaining some prejudice against all such preparations. But experience in its use requires us, as a matter of justice, most emphatically to indorse the preparation after an extended and impartial trial. In fact, we expect in future to use Bromidia exclusively."

Reviews.

The Physician Himself: What he should add to his scientific acquirements.

By D. W. CATHELL, M. D., late Professor of Pathology in the College of Physicians and Surgeons of Baltimore, etc. Second edition, carefully revised. Baltimore: Cushings & Bailey, 262 W. Baltimore Street.

We are glad to welcome a second edition of this little work. That a second edition has been so soon called for is satisfactory evidence of its value. We have only to renew the commendation which we expressed in our previous notice of the book. The author has availed himself of the opportunity of a revision to make some changes and additions which are of value.

Medical Diagnosis with Special Reference to Practical Medicine. A guide to the knowledge and discrimination of diseases. By I. M. DA CASTA, M. D., LL. D., Prof. of Practice of Medicine at the Jefferson Medical College, Philadelphia. Illustrated with engravings on wood.

Sixth edition, revised. Philadelphia: J. B. Lippincott & Co. 1884.

It is hardly necessary to do more than announce a new edition of this admirable work. A book so widely known and so highly valued as to have attained, in a few years, to its sixth edition, needs no praise. Like a good many other books of American authorship, it is extensively used in England, and has been translated into German, French and Spanish. This new edition contains a good deal of new matter and a number of wood cuts have been added. It is one of the books which ought to be in every physician's library.

Eczema and its Management. A practical treatise based on the study of three thousand cases of the disease. By T. DUNCAN BULKLEY, A. M., M. D., Physician to the New York Skin and Cancer Hospital, etc. Second edition. New York: G. P. Putnam's Sons, 27 W. 23d Street. London: J. & A. Churchill.

We are heartily glad to receive a new edition of this classical work. Eczema forms at least one-third of all the cases of skin diseases, and it requires no little knowledge and discretion to successfully treat it. Very many of these cases are prolonged and the severity of the disease increased by unwise medication, but there are few of the chronic diseases which respond more happily to careful, thorough and judicious management. This book of Dr. Bulkley is an invaluable guide, practical in every way, logical in arrangement, and exhaustive, for nothing of value is omitted. The publishers have given the book as handsome a presentation as so good a book deserves.

A Manual of Psychological Medicine and Allied Nervous Diseases.

Containing the description, etiology, diagnosis, pathology and treatment of insanity, with especial reference to the clinical features of mental diseases and the allied neurosis, and its medico-legal aspects, with a carefully prepared digest of the lunacy laws in the various States relating to the care, custody and responsibility of the insane. Designed for the general practitioner of medicine. By EDWARD C. MANN, M. D., member of the New York Medico-Legal Society, etc. With photo-type plates and other illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1883.

Psychological medicine is rapidly assuming the proportions of a well-defined and harmonious system of science. It has advanced from small beginnings and unsettled proportions, till today it has become the adjunct of jurisprudence in settling a class of difficult and otherwise inexplicable questions which arise in the administration of justice. The appearance of Dr. Mann's excellent treatise is timely, for it is of importance that the gen-

eral practitioner should have the means of conveniently informing himself in the latest advances and the outcome of the practical experience of the distinguished men who are laboring in this important field. The description, etiology, diagnosis, pathology and treatment of insanity, and also its medico-legal aspects are intelligently treated, and the value of the book is further increased by a carefully prepared digest of the lunacy laws in the various States relating to the care, custody and responsibility of the insane. We can heartily commend the work to our readers as one worth buying.

Drugs and Medicines of North America. J. U. & C. G. LLOYD, Publishers, 180 Elm Street, Cincinnati, O. Issued quarterly. Price, \$1.00 per year.

The first number is before us. The authors announce that it is their intention to take up the entire list of American medicinal plants, issuing their work as a quarterly, and only to subscribers. This number contains three full-page engravings of the plants considered, viz.: *Clematis virginiana*, *Anemone thalictroides* and American *Pulsatilla*, and a full-page microscopic engraving of a section of *Clematis virginiana*. In addition, there are numerous illustrations in the text. The botanical, chemical and medical histories and descriptions are thoroughly and carefully drawn, all the works that have been written on American drugs being consulted in the preparation of each subject. The medical properties and history are especially interesting to physicians, and in this one work we are presented with all that is known upon each subject. The paper on American *Pulsatilla* is exceptionally valuable at this period, for preparations of the European plant are now largely imported, and the American species will no doubt supplant the foreign in time to come. The authors state that the following plants will be considered in the immediately succeeding numbers, each article illustrated with a full-page engraving, together with numerous pictures showing the microscopic structure, botanical characteristics, parts used in medicine, sophistications, etc.: *Anemone hepatica* (liverwort); *hydrastis canadensis* (golden seal); *coptis trifolia* (golden thread); *actæa alba* (white cohosh); *cimicifuga racemosa* (black snakeroot); *xanthorhiza tinctoria* (shrubbery yellow root).

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Original Communications.

EPILEPSY.*

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In this paper I have attempted to give some of the most generally accepted theories regarding the disease and the methods of treatment, both medical and surgical, and have presented them largely in the language of the various authors quoted. These theories and methods have been brought together in the form of an article, for convenience of presentation in the most compact form for the busy practitioner.

"Epilepsy is a chronic functional disease of the nervous system, characterized by recurring paroxysms of impairment or loss of consciousness, accompanied, usually, by partial or general convulsions."—*Ross*.

This definition comprehends the following particulars:

- 1st. It is a functional disease.
- 2d. It is characterized by recurring paroxysms of impairment or loss of consciousness.

* Read before the Medical Club.

3d. It is generally, but not always, accompanied by convulsions.

These are essential points in the diagnosis of the disease. Epilepsy tends to become chronic, and the early recognition of it is, therefore, of the greatest importance.

Marshall Hall was the first to locate this disease in the brain. He considered the primary seat to be in the medulla, and that it had a peculiar effect on the nerves of the throat, so that at each attack there was produced a mild spasm of the muscles, which he called trachelismus, or a severe spasm which he called laryngismus. "It is a strange phenomenon," said he, "that these causes should select the muscles of the throat principally for the display of their influence." He went so far, and was so grounded in his belief, that he recommended, for the petit mal or slight spasm, venesection, and for the grand mal or severe spasm, tracheotomy. Brown-Sequard maintained that the primary seat of the disease was in the medulla, or, in many cases, in the base of the brain, and that the fit was produced by the action of carbonic acid gas or other toxic agent. Dr. A. Flint, Sr., sustains Brown-Sequard in the following language, as reported in the *New York Medical Journal*, that the manifestations of epilepsy were dependent upon a toxical agent of some kind, produced in the body in some manner, and in proof, advanced these points:

1st. In the absence of any generally received pathological doctrine, he assumed, as a postulate, that epilepsy had no established anatomical character. It might be associated with different lesions, and in a certain number of cases no lesion was discoverable.

2d. There was an analogy between the phenomena of epilepsy and those known to be produced by a toxical agent. The closest analogy existed between epilepsy and uræmic coma with convulsions. An attack of the latter might so closely simulate epilepsy that a diagnosis could not be made until the urine had been examined. The action of remedies which had been found

useful, as the bromides and belladonna, might be explained by saying that they enabled the nervous system to tolerate, to a greater or lesser extent, the toxical agent on which the disease depended.

Kussmaul gave, as the result of his experiments, that the epileptic phenomena were due to an anæmia of the brain. This theory has many adherents, and Echeverria, in speaking of it, says: "Were I to present a definition embracing the principal features of the disease, I should say that epilepsy is a disease constituted by chronic paroxysms excited upon a direct or reflex action of the medulla oblongata in a condition of exalted irritability coincident with sudden depression in the cerebral circulation, and with loss of consciousness, with or without muscular spasms." This definition, he says, does not differ from that of Van Der Kolk, which seems to be the most rational. For various reasons, which he states, he further says: "I am led to admit that the medulla oblongata is the original seat of epilepsy, and that the disease primarily involves the vaso-motor nerves."

The theory of Hughlings Jackson is next to be considered. It is supported by Gowers, one of the most careful students of the disease. This theory holds that the phenomena of epilepsy are all explained by a discharging lesion of the cells of the gray matter, and that the disease affects the motor centers and does not often have its primary seat in the medulla. Gowers says: "There are no facts to warrant us in seeking the seat of the disease elsewhere than in the gray matter in which the discharge commences. This is, in most cases, within the cerebral hemispheres, probably, often, in the cerebral cortex, although, possibly, in some instances, lower down, and may be even in the medulla. Epilepsy is thus a disease of the gray matter, and has no uniform seat. It is a disease of tissue and not of structure." He also adds: "And the hypothesis of vascular spasm is as unneeded as it is unproven. The last question is: 'What is the nature of this tissue change? Can we form any opinion as to

the character of the alteration in the gray matter which permits its sudden discharge?' It is answered in the following language: In the construction of a motor nerve center, it is requisite to create an apparatus which is always ready to evolve force, but which shall not do so spontaneously without the application of a stimulus of some kind or other, either physical or mental. The peculiarity of nerve cells is that they possess two qualities: They prepare material which, by undergoing oxidation, generates force, and yet, they can prevent this material from so acting, although blood is circulating all around it charged with oxygen. In states of spasm this property of the nerve cell is lost or much impaired, and the discharge of highly unstable cells leads to the discharge of healthy cells in other centers, with which there is an anatomical connection by fibres. The discharging lesion may be likened to a fulminate which overcomes the resistance of less unstable compounds. The nerve cells are likened to so many Leyden jars, which generate the electricity. Thus the explosion is due to a sudden diminution of resistance by which the pent-up nerve force is released, thus causing the epileptic phenomena."

This theory of Hughlings Jackson is one which affords, to many minds, a full and satisfactory explanation of the singular phenomena. The arguments, pro and con, I have not space to present. One very strong point in favor of this theory is that "when the commencement or aura was in the hand, a ligature to a certain point, as the elbow, would stop the fit."

The recent studies have been more beneficial than the explanation of the theory, as they have proven that much can be done to alleviate the disease and that many patients are saved who formerly were allowed to go on from bad to worse till death ended the scene.

We will now review the results of treatment, including both the action of drugs and the surgical means which have been found useful. We must remember that we have to deal with a chronic disease, and that the treatment must be persistent and

long continued. It is a fair criticism to make of the treatment of epilepsy generally, that it is not begun soon enough, that it is not continued long enough, and is too readily interrupted upon a slight pretext, as the presence of an acne, or minor symptoms of indigestion. In this way a favorable result may be jeopardized.

"We have still too little definite knowledge of the pathology of epilepsy to permit of safe generalization regarding the possible mode of action of the several drugs which are found clinically useful. All that can be done is to recognize the kind of action which they have been found to exert upon the nervous system." The various bromides are found valuable, both as palliative and curative agents. All persons cannot tolerate them, and some are relieved by them, only, when associated with other remedies. The bromides, in their action, have been said to cause contraction of the small vessels of the brain, but it is exceedingly doubtful whether their influence in epilepsy is due to this action. "They have unquestionably a direct influence upon the nerve elements, diminishing, for instance, reflex action in the spinal cord, and act on the nerve cells of the brain, and it is probable that mental dullness and sleepiness, produced by large doses, are due to such action. If, then, we believe with Hughlings Jackson that the primary change in epilepsy is a morbid action of nerve cells, it is reasonable to conclude that the drug does good by directly influencing them."—*Gowers*.

In choosing which one of the bromides to use we should remember that it is an undoubted fact that the bromide of potassium has greater power to control this influence than any of the other bromides, notwithstanding it has less of free bromide than any of the other salts, as the bromide of lithium contains ninety-three per cent., bromide of ammonium, eighty-one per cent., bromide of sodium seventy-seven per cent., and the bromide of potassium sixty-nine per cent. It has been maintained that the bromide of sodium does not cause disturbances of the stomach so frequently as the bromide of potassium, but this is not borne out by clinical experience. The

usual method employed in the administration of the drug, is a dose given at certain intervals during the day. The average dose for an adult is, grains xxx, three times a day, largely diluted with water, and given before meals. When the drug has been taken for a few days, reduce to gr. xx, three times a day. "A novel mode of determining the amount needed is to test the reflex action of the muscles of the fauces by touching them. If we find they do not readily respond, the patient is fully under control of the drug." The dose above mentioned should be continued from day to day, without any interruption, for weeks and months, unless severe toxic symptoms occur, when it should be reduced, but not suspended. Bromides are not readily eliminated from the system, and in this small dose we have the blood constantly saturated with the drug, and hence its beneficial effect. From such a dose we have no bad effects but a slight acne, which is readily relieved by the use of a few drops of liq. potass. arsenitis twice a day.

Many cases are relieved and many cured by the use of this drug alone. Of one of these cases the history is as follows: J. C., admitted June 2, 1883, aged 36, lawyer. No history of insanity, epilepsy or other nervous disease in the family. Patient, up to present attack, had been perfectly healthy. About one year since, after a hard day's work, had an attack, during which he lost consciousness for a few moments. A physician who was called said it was nothing serious, that he only fainted.

This was undoubtedly an attack of petit mal, and about five weeks ago he had the second attack, similar in character.

After several attacks his physician told him he had epilepsy. His attacks were finally accompanied with mania, lasting several hours, and on this account he was sent to the asylum.

On the day of admission he had an attack of petit mal. Was given bromide of potassium, grains xxx, three times a day, directed to exercise in the open air, and put on liberal diet. In two weeks the bromide was reduced to grains xx, t. d. At the end of six months patient had no un-

pleasant symptoms, except some gastric disturbance and constipation, both of which, however, he had been subject to from time to time for years. The former was readily relieved by confining him to an exclusively milk diet, the latter by use of *rhamnus frangula*. He had a few restless nights, which were relieved at once by a moderate dose of chloral at bed time. He continued to improve, and after a year's treatment, without the recurrence of an attack, was discharged, recovered.

The length of time a patient should go without a fit is from twelve to thirteen months, and medicine should be continued from eighteen months to two years.

At the end of this time the patient is said to be safe. Gowers recommends, in certain cases, when the fits recur at definite intervals, what is called the large dose method of giving bromides. He gives from 3ij to 3iij , either just before the expected attack or during the day. This is given in a half a pint of water, and being so largely diluted does not cause either pain or vomiting. This dose may be increased to half an ounce, but not beyond the amount that produces temporary lethargy and mental dullness. Gowers has given six hundred and forty grains at one dose. This method has been so little used that it is difficult to tell what will be its practical value. Some cases do not tolerate the bromides alone, but these can take Brown-Sequard's mixture, the recipe for which is given in all works on epilepsy. In those cases where syphilis is suspected, iodide of potassium should be given with the bromides. The combinations of bromides with other drugs are of great value, as in many cases a better effect is produced by the combination than by either drug given alone. One of the best remedies to associate with the bromides is *digitalis*. It is especially recommended in those cases in which the disease is complicated by cardiac troubles, valvular defects, dilatation, irregularity and undue frequency, of the heart's action. It is also of considerable use in cases of nocturnal epilepsy.

In what way digitalis is useful in epilepsy is at present unknown, but Gowers reports cases relieved by this drug in combination with bromides when each separately had failed. Belladonna is associated with the bromides, and is said to be of value in cases of petit mal. Its influence is probably due to its direct action on the nervous system. This is highly recommended by English authors, and is also used by some specialists in this country. A case which I observed some four years since was permanently relieved by the use of atropia in 1-120 of a grain dose twice a day. Dr. Roberts Bartholow, in speaking of this drug, says: "The best results are obtained from it in nocturnal epilepsy, in petit mal, and in pale, delicate and anæmic subjects with cold hands and feet, blue skin and weak heart." He also says: "I have given strychnia with the bromides, in cases of epilepsy occurring in weak and anæmic subjects."

Fluid ext. ergot in doses of twenty minims and fluid ext. conium in same dose, associated with bromides, have been of great service and are highly recommended by some. The careful regulation of the diet, with plenty of air and exercise, are necessary adjuncts of treatment.

We see, then, from the foregoing that the bromides are the most useful remedies, and I present here some facts which may be of service in their administration:

First, the bromides generally succeed less well with children than adults, perhaps because the epilepsy of childhood is more allied to congenital states of the nervous centers than that of adult age. It is also more rapidly eliminated by children and the reflex action of the spinal cord with greater difficulty suppressed. Clark recommended brom. pot. grs. x to xx, daily, for a child one to three years of age. Between five and ten years, grs. xxx; ten and fifteen years, grs. xxxx to clxxx. "It appears from various sources and experiments that this drug is only readily absorbed when largely diluted and when the mucous membrane is healthy. Hence in dyspepsia and gastritis it should be avoided. Though this drug is a fixed salt, it is disturbed by acids, hence it

should be given before meals when the secretion of the stomach is neutral, for when the stomach is at work and contains food, the secretion is acid. It is apt, under these circumstances, to disturb the stomach and to cause free bromine to be liberated, and gastric irritation and eructations are produced. It is absorbed readily by the rectum, and should be given in a great amount of water, as grs. x to ʒj. The irritant qualities of bromides forbid the hypodermic use."

"An ordinary dose shows itself in the blood in about ten minutes and is eliminated in eight hours. A large dose is not eliminated for twenty-four. Hence a large dose once a day or a small dose three times a day keeps the blood charged with the drug constantly. Diuretics should be regularly given in order to increase the urinary secretion and the elimination of bromide. This will prevent certain cutaneous diseases that are very disagreeable to the patient. Iron should always be associated with the use of bromides if there be the slightest appearance of anæmia, which its long continued use is apt to induce. Hitherto electricity has been used with comparative infrequency. Understanding, as we now do, that this is a disturbance of the cells of brain tissue, manifested by an explosive discharge, we have the *rationale* of the treatment of epilepsy by electricity, and our efforts are directed toward the epileptic change in the brain."

Althaus, in his new treatise, recommends the transverse galvanization through the mastoid processes and galvanization of the sympathetic. Erb follows this idea and employs a stable, but very feeble current of four to six elements, which he passes through the head obliquely from the temporal region and upper part of the forehead on one side to the opposite side of the back of the neck. He allows the poles to remain from one-half to one minute, then he employs it longitudinally from the forehead to the back of the neck. Where vaso-motor symptoms are marked during an attack, he galvanizes the cervical sympathetic. Careful trial of faradic currents to the head appears justifiable. Althaus advises the galvanic current to be applied to peripheral

nerve tracts in which the aura is situated. He would also use it if a neuralgia, a nerve injury, a cicatrix or the like is suspected as the starting point of the epilepsy, even if it is not the site of an aura; reports some striking results. Erb has had some favorable cases which should lead us to faithfully use this remedy.

We next consider the surgical treatment of epilepsy, which presents to us several operations :

- 1st. Trephining.
- 2d. Ligature of carotid.
- 3d. Nerve stretching.

Trephining is a very old operation, but before the present century was little used, and there were few recoveries. In the beginning of the present century Tissot had good success in this operation. Dr. Dudley, of the Transylvania University, was the first to introduce it into this country. His writings were brilliant, but much of the glory was taken away when a colleague, jealous of his success, translated many of the Doctor's sayings from articles written by Mon. Tissot. Since that time this operation has been performed by many with a more or less degree of success. Nearly all of the authors agree that the "principal indication for resorting to trephining is when the disease follows an injury to the head, from which we conclude that a depression, a fracture of the internal table, a spicula of bone or a collection of fluid is pressing upon and irritating the brain." The plainest indication for the use of the trephine is actual depression of the cranial bones at the seat of the injury, for here "the cause of the morbid condition of brain is not only apparent, but its precise location indicated." We find, first, in the history of this disease, that the records of medicine in our own country look upon the operation, especially when the cause is traumatic or when there is depression, as justifiable. Dr. Stephen Smith, in 1852, in the *New York Medical Journal*, reports 27 cases, and considers the operation simple, and from which we could hope much in cases where we have depression

as the known cause of the disease. In a private letter written me a few days since, he says: "In 1852 I tabulated 27 cases, which was the first article I knew of on this subject at that time. Since then the operation has been very frequently performed, and it is a very proper operation when there has been a local injury. It is a very harmless operation if cautiously performed. I should select cases by preference which have a cicatrix which is tender or the seat of an aura. Since 1852 I have operated upon or been consulted in ten cases, as recorded below.

Dr. Agnew says: "In most cases, under favorable circumstances the operation is not only justifiable but urgently demanded. The danger from this is very much exaggerated." He considered the conditions which justify the operation in cases following fractures, "when the occurrence of very frequent attacks causes progressive weakening of mental faculties, and when remedies have failed to control the disease." Dr. Gross has had poor success in this operation and fails to give his opinion as to the advisability of performing it. Dr. Echeverria, of New York, who has written extensively, records 148 cases and says: "I need not add that from my own experience in the matter and from analysis of cases, I am in favor of trephining the skull for relief of epilepsy, due to local injury to the head, and I consider, with Dr. Van Buren, that the operation is comparatively a simple and harmless one, its seriousness being explained by the fact that it is performed in cases which, from their nature, are fatal. The risks of trephining are greatly diminished if especial care be taken not to injure the dura mater and cerebral membranes."

We find, then, these three noted surgeons and one specialist in favor of this treatment. By referring to Ashurst's Surgery we find, with regard to trephining: "I can only state that I consider the operation unavoidable; its risks are not inconsiderable. When we remember the well-known fact that epilepsy is apparently and temporarily curable by various remedies which have at

least the merit of being harmless, we should pause before we recommend an operation which may not, improbably, itself cause death, and in which the proportionate benefits are doubtful." Ericson says: "The operation and its results are certainly not favorable." Dr. Russel considers it justifiable and has good success. Heath, of London, reports several favorable cases. Billroth and Luecke report 49 per cent. of recoveries in this operation and favor it. Dr. Adolph Bardelaben, of Berlin, says, in his recent work: "I consider it only justifiable when the person's life is in danger." Nothnagel, in Ziemssen's, says: "We are willing to grant that the operation, with our present experience, is generally allowable, and we must regard its success in any particular case as a piece of good fortune which could not have been predicted."

Table showing the results in one thousand and sixty-five cases :

	Cases.	No. Cured.	No. Died.	Not Re- lieved.	Re- lieved.
Billroth & Luecke....	709	352	357	..	..
Echeverria	148	93	28	9	18
Walsham	26	20	..	6	..
Russel	50	24	6	10	4
Billings.....	72	42	16	10	4
Smith, in 1852.....	27	7	..	15	5
Smith, in 1884.....	10	3	..	3	4
Operated in this city by three surgeons...	3	1	2	..	..
Volkman's Klinik....	14	11	3	..	..
Also with no depression	8	7	1	..	..
	1,067	560	413	53	35

The table presented above gives as cured about one-half of the cases. This is about the average which is recorded in other tables. This is, then, an operation which we should try in appropriate cases before giving up our patient as lost. With the medical and surgical means at our command we certainly can place this disease among the list of curable ones, instead of consigning it to the category of the incurable and hopeless.

CASE OF FRACTURE OF THE SKULL.

BY CHAS. A. WALL, M. S., M. D.

It is accepted that in punctured wounds of the skull the inner table is generally more broken and depressed than the outer, and in many cases the absolute necessity of surgical interference is only discovered in the course of the operation. Recognizing this fact, most writers upon surgery recommend the use of the trephine in these cases upon a different principle than in ordinary depressed fractures, and lay it down as a rule to apply the trephine in all cases of punctured wounds where there is any depression, whether there are signs of compression or not. A punctured wound being a compound one, the outer table is exposed, and from it the condition of the inner table can usually be judged, but at times cases will present themselves in which the advisability of an operation must be carefully considered, and the indications well weighed, before so serious a procedure as exposing the membranes of the brain is decided upon. Among this latter class I would report the following case: Chas. R., aged 45, German, a carpenter by trade, was a stout, healthy, thick-set man, of good family history, who was injured Nov. 2, 1882, by a brick falling upon his head from a distance of about thirty feet. He wore, at the time, a heavy, stiff felt hat, which may have somewhat deadened the force of the blow. He was rendered unconscious for a moment, but soon recovered and walked to my office, a distance of a quarter of a mile. Upon examination I found a triangular wound of the scalp one and one-half inches long, with the scalp loosened anteriorly an inch farther. At the anterior-superior angle the skull was depressed to the depth of three-sixteenths of an inch. The fracture was on the vertex and a little to the right of the median line, one-half of an inch square. This was not movable to any perceptible extent, but when subjected to slight pressure in making a digital examination, it caused him to vomit. Allowing him to become quiet I again made pressure with the same result. His

pulse being full and slow and respiration impeded I determined to remove the depressed bone. Sending him to his home I operated, with the assistance of Drs. Stockton and Frederick, at 11 A. M., one and one-half hours after he received the injury.

An anæsthetic having been administered, the wound was enlarged an inch anteriorly and an endeavor made to remove the depressed fragment, but it was so held by the other portions overlapping that this could not be done. Including the depression in a large trephine, both tables were carefully removed, when a piece of bone from the inner table was found penetrating the membranes, upon withdrawing which free hemorrhage followed from the point of injury to such an extent that it seemed as though the superior longitudinal sinus had been opened. Careful examination, however, showed that the puncture was nearly an inch to the right of the median line. The inner table was rounded off and the wound cleaned. Hot water was applied to stop the bleeding, but as this did not control it, and it was venous in its nature, I concluded that the best thing to do under the circumstances would be to draw the scalp together and dress with a compress, watching for any symptoms due to pressure from a clot forming under it. Accordingly, the wound was drawn together by two sutures at the angles, leaving the inferior portion open for drainage. A compress was applied and the patient put to bed. One-sixth of a grain of morphia was given, to be repeated every three hours. When seen again, at 5 P. M., his pulse was 120, temperature normal and respiration regular. Upon removing the compress, there was no bleeding and the scalp had approximated through the whole extent of the wound.

November 3d, at 9.30 A. M., pulse 75, temperature 100°, and the wound appears to be uniting. From this time he could not be induced to maintain the recumbent position, as he said he felt as well as ever. A few days later I removed the stitches, as the scalp had entirely united by first intention. Within ten days he visited my office after walking five miles, and on the 15th of November he began to work at his trade. The

spicula of bone which penetrated the membranes was pyramidal in shape, one-half an inch long, one-quarter of an inch wide and one-eighth of an inch thick, tapering to a sharp point.

It is remarkable that so serious an injury should heal so kindly, producing so little local or constitutional disturbance. When last seen, April 28, 1884, Mr. R. told me that he had been perfectly well and had suffered no inconvenience from the operation. The scalp was not tender to the touch, and was only slightly depressed where trephined. He had never found any ill effects from working in the sun in the hottest weather. He was in perfect health when injured and could not be impressed with the gravity of the operation. Feeling hungry during the night, he had arisen, gone into an adjoining room, and helped himself to some bread and butter. This probably accounts for the fact that his temperature went up to 100° on the morning of Nov. 3d, and it was the only time I found it above the normal. After the first day he was up and around the house, and it was almost impossible to keep him from going out, since, as he said, he soon felt as well as ever. In conclusion I would remark that the history of the case illustrates three facts:

1st. It may often be good surgery to trephine when the symptoms do not point to compression in so decided a manner as to warrant interference, for the condition of the inner table and membranes beneath can only be known after the removal of the outer table.

2d. Hemorrhage, even when alarming, if venous in character, may often be easily controlled. I stood ready, upon the first manifestation of pressure from a blood clot, to open the wound, and, if possible, place stitches in the torn vein, but happily it was not needed.

3d. The blood, filling up the place of the bone which was removed, did not cause any trouble, and was soon either absorbed or formed into organized tissue.

Society Reports.

ERIE COUNTY MEDICAL SOCIETY.

The semi-annual meeting of the Erie County Medical Society was held at the Buffalo Medical College, June, 10, 1884.

The meeting was called to order by the President, Dr. J. C. Greene.

The following members were present: Drs. F. H. Potter, Daggett, Daniels, Fell, Walsh, Hubbell, Cronyn, Greene, Gay, Lothrop, Marcley, Ingraham, Lynde, Hopkins, Howe, Storck, Phelps, Harrington, Mann, Wyckoff, Warren, Coakley, Barker, Cary, E. E. Storck, B. G. Long, Abbott, Pryor, Diehl, Hill, E. H. Long, Park, Gregory, Van Peyma, Dorland, Stockton, Krug, C. A. Ring, Hoyer, Schada, Benj. Lothrop, Frederick Davidson, W. W. Potter, Crawford, Witthaus, Hebenstreib, Mynter, Folwell, Niemand, Hauenstein, Frank, Nichell, Bartow, Wetzel, McBeth, Brecht, Dambach, Mickle, Wall, Montgomery, Samo, Keene, Boies, McPherson, Bartlett, Hawkins, J. H. Potter, Bauer, Persons, Root, Ballou, Wm. Ring, Clark.

The minutes of the annual meeting, and the minutes of the special meeting of April 8th, were read.

Before the minutes were adopted, Dr. Hopkins said he wished to call the attention of the society to Section 16, Article 4 of the By-Laws, which provides that "on a division, the names of all members voting for, or against, a question or motion, shall be entered upon the minutes." According to the reading of the minutes, this rule had not been observed.

Dr. Wyckoff moved that the Secretary be instructed to correct the minutes so that the ayes and noes appear in the report of the society's meeting.

Dr. Hopkins moved that inasmuch as the minutes were incorrectly reported, that portion of the minutes relating to the admission of Drs. Tremaine and Heath be corrected, so as to

read as follows: "That inasmuch as Drs. Tremaine and Heath have, at a previous meeting of this society, been invited to participate in the proceedings, the rules be suspended, so as to construe such invitation to include the privilege of voting upon any question before the society at this meeting or any meeting hereafter."

During the discussion on the resolution of Dr. Hopkins, Drs. Tremaine and Heath said that the society need not discuss any further the question of their membership, for they did not wish to be members of the society, and while they were thankful for past courtesies extended to them, they would now withdraw.

After one or two minor corrections, the motions offered by Drs. Hopkins and Wyckoff were adopted, and the minutes, as corrected, were approved.

Dr. Dorland, chairman of the Committee on Membership, reported as follows: "The following gentlemen presented their credentials at the January meeting, in 1884. The committee find that the diploma of each was granted by a medical college in good and regular standing, and we recommend the following named gentlemen for membership, viz.: Herman Bauer, Roswell Park, R. M. Root, F. R. Campbell, Julius H. Potter, Andrew F. Helwig, Wm. B. Hawkins, Alpheus Prince, Herbert Mickle, Stephen Y. Howell, Louis Carmer.

Report received and recommendation adopted.

Dr. Barker moved that the new members be introduced to the society by the chairman of the Committee on Membership. Carried.

The new members were introduced by Dr. Dorland.

Applications for membership were received from the following gentlemen and referred to the Committee on Membership, viz.: Wm. Pask, James Porter, H. Parmenter, A. B. Wilson, Wm. G. Ring, F. W. Hinkle, F. P. Vanderberg.

The Board of Censors, through their chairman, Dr. Storck, submitted the following report :

Your Board of Censors would respectfully report that inasmuch as the minutes of the society give a full account of the doings of the censors from the time of the annual meeting in January down to the special meeting of April 8th, it is deemed necessary to make a report, at this time, only of work accomplished subsequent to the date last mentioned. In obedience to the resolutions of the society condemning the bills establishing certain medical colleges in this city, at that time pending before the Legislature, the censors at once opened correspondence with the authorities at Albany, and learned that the objectionable bill relating to the Seminary of our Lady of Angels known here as Niagara University, had already passed the Senate, having passed the Assembly before knowledge of its existence came to the censors, and was already in the hands of the Governor.

At the request of the censors, a hearing before the executive was set for the 12th of April. The advocates of the bill were represented at this hearing by several members of the medical faculty, and by the trustees of the Seminary of our Lady of Angels and by their attorney, Mr. Morey, while the society was represented by a member of the Board of Censors and their counsel, Mr. J. F. Milburn. This gentleman ably presented the objections recited in the resolutions condemning the bill, adopted at the special meeting of April 8th, and the arguments and influence of the other side seemed to be insufficient to break the force of their effect.

As the result of the hearing, the Governor did not sign the bill, and it therefore did not become a law.

Subsequently a new bill was introduced. This was brought to the notice of the censors, and found to be free from the faults of its predecessor of 1883, and of March 11, 1884. This passed the Legislature and was signed by the Governor.

This last bill provides :

"SECTION 6. Whenever, in the opinion of the regents of the university, the state of literature in the said seminary and the value of property, according to the regulations of the said regents, shall justify the same, said regents may, on the petition of the trustees, by an instrument under their common seal, erect the said seminary into a college, with such name and such number of trustees, and on such conditions, and with such powers and privileges, and subject to such regulations and restrictions, conformable to law, as the said regents may deem proper, and the said college shall have the right to maintain a medical department, and any other department of learning that is maintained by any college or university in this State, and may maintain any department thereof, and enjoy and exercise all or any of the powers, rights, and franchises thereof in the county of Erie, and the trustees of said college shall have the power and

right to grant and confer any degree which may be or is granted and conferred by any college, university or other institution of learning in this State, legally authorized so to do, and every diploma given in testimony thereof shall entitle the possessor to all the immunities which, by the law or usage, are allowed to the possessors of similar diplomas granted by any college, university or other institution of learning in this State, and the trustees of such college may grant and confer the degree of Doctor of Medicine, but only upon the recommendation of the board of medical professors of said college, and of at least three curators of the medical profession fully and legally qualified to practice medicine and surgery, to be appointed by said trustees, and who shall not in any manner be connected with said college. But no person shall receive a diploma conferring such degree unless he be of good moral character and of the age of twenty-one years, and unless he shall have received a good English education, and shall have pursued the study of medicine and the sciences connected therewith at least three years, after the age of sixteen years, and shall have received instruction from some physician and surgeon legally qualified to practice his profession until he is qualified to enter a medical college, and also shall have attended at least three complete courses of lectures in the medical department of some legally incorporated university or medical school, the last of which courses shall have been so attended in the medical department of said college."

In comparing the bills, it will be observed that the changes introduced in this bill are directly in the line of the criticism made upon the previous attempts at legislation by this college, as expressed in the resolutions adopted at the special meeting of April 8th.

In the case of the bill to establish the so-called "Mohawk College," equally important amendments were secured, so that the bill specially states that it does not legalize the said college, but only legalizes the diplomas thereof granted to its students. In this amended form the bill has passed the Legislature, and is reported as having been signed by the Governor.

In the prosecution of this work the Board of Censors has incurred an expense of \$75.00, the items being \$25.00 for the opinion of Rogers, Locke & Milburn upon the competency of the charter of the Niagara University, and \$50.00 for the services of counsel at the hearing before the Governor, April 15th.

Your board would further report that conclusive evidence is in the hands of the censors against a number of persons still practicing medicine in this city and county in violation of the laws of the State, notwithstanding notice having been served upon them to desist from so doing. The chairman of the board has been directed to prosecute them forthwith. Warrants have been issued by

the Police Court, and were served, on Monday last, upon the following named persons, viz.:

Frederick Dellenbaugh, 173 Broadway.

Caspar Retel, 259 Broadway.

William Volker, 333 Ellicott street.

Mrs. N. Kuhn, 290 Ellicott street.

Mrs. J. H. Matteson, 248 North Division street.

The board would ask for an appropriation of sufficient funds to proceed with the prosecution.

EDWARD STORCK,

H. R. HOPKINS,

P. W. VAN PEYMA.

After the report of the Board of Censors was read, Dr. Hopkins moved that it be received and placed on file, which was carried.

Dr. Hopkins, from the Committee on Legislation, presented the following report, which was received and placed on file:

To the Medical Society of the County of Erie:

MR. PRESIDENT AND GENTLEMEN—Your Committee on Legislation would report: One year has passed since your committee was appointed, and upon reviewing the events of the year and the progress which has been made in the particular work in which it has been engaged, there is found abundant reason why the society should congratulate itself upon the success of its efforts and upon the general state of the movement for improved methods in the manner of licensing physicians. This time last year, the question of a State Examining Board was one securing but slight attention from physicians, and none at all from the public at large; but for the last six months there has been no medical topic of equal prominence with this in professional circles, and the files of our daily papers show repeated instances of the interest extending beyond the profession, and that the public at large are awakening to an earnest appreciation of its importance. At the time of the last stated meeting of this society, in January of this year, many of our more sanguine friends were positive that our efforts were to be crowned with entire and speedy success by the passage of the State Faculty Bill by the Legislature then sitting, and your committee is of the opinion that such would have been the case, but for the action of the State Medical Society in declining to recommend the bill which its own Committee on Legislation had adopted and was vigorously endeavoring to pass. This action was as unexpected as it was calamitous, and furnishes one more illustration of the power of a well-organized and alert minority, more particularly when that minority represents a long-established and lucrative monopoly. Such monopolies relinquish their power only after a

long and desperate struggle, the will of the majority being evaded or defied as the result of the temporary triumph of the well-organized few over the unorganized many. There was in this failure, however, no cause for disheartenment, and much that should encourage. The most that its enemies can claim is that they defeated the particular bill then before the Legislature, and this was done by appealing to the well-known and characteristically conservative disposition of our profession, with the claim that more time should be taken to consider this question; that the matter was one of great importance and should not be jeopardized by too hasty action, and that it would do no harm to lay the matter over, for more consideration, another year, etc. Under this skillfully developed, specious and disingenuous special pleading the State society voted to lay the matter over. Emboldened by this partial victory the enemies of State license moved to kill the main issue by referring it to a committee specially prepared for this purpose, and in this they were most emphatically checked and beaten. The society then, by a fair majority, voted to endorse the main principle of this matter of State license, and referred the subject to a special committee, with instructions to report a bill for the consideration of the society at its next meeting.

Your Committee on Legislation is represented on this special committee, and is informed that the work is to be vigorously pushed upon the line essentially introduced to the profession in the Erie county bill. Our society, therefore, can claim, as the result of the first year's effort in the cause of securing State license for physicians, that the question has been established as the leading topic for discussion all over the State; that the plan proposed by this society has been discussed, considered and approved by the county societies of Albany, Allegheny, Broome, Cayuga, Chautauqua, Chemung, Fulton, Genesee, Herkimer, Lewis, Livingston, Monroe, Niagara, Oneida, Onondaga, Oswego, Rockland, Schenectady, Steuben, Tioga, Tompkins, Wayne, Westchester, Wyoming and Yates; that the ground plan of the measure has been approved by the societies of New York and King's counties, and favorably considered by Chenango, Jefferson, Ontario, Orleans, Saratoga, Schuyler, Seneca, Warren, and nearly all the others. That the topic was by all means the most prominent one at the late meeting of the State society, inasmuch as its discussion took up nearly all the second day of the session, and is to be kept before the profession during the present year, in the hope that a plan may be devised which will command the support of the profession at large, as the best means to correct the fault in our present mode of licensing physicians, a fault which even the enemies of the movement are forced to admit.

In conclusion, the committee would recommend that the society continue its interest in this work. Great progress has been made, but the enemies of the cause are still determined, active and powerful. The initiation being taken

by the medical society of the State does not prevent this society from finding and doing telling work.

The interest shown by the various county societies throughout the State in our efforts, would indicate that this society has the opportunity to make for itself upon this question a position of no inconsiderable influence and power, and it is, therefore, recommended that the Medical Society of the County of Erie hereby reaffirms its sense of the importance of the effort to secure an improved method in the licensing of physicians, and believes that this improvement will only be reached when a State board shall absolutely separate the licensing and teaching power. In the furtherance of this end it is recommended that there shall continue to be a Committee on Legislation.

Respectfully submitted,

H. GREENE, *Chairman*,
EDWARD STORCK,
M. D. MANN,
F. S. CREGO,
A. R. DAVIDSON,
A. H. BRIGGS,
H. R. HOPKINS,

Committee on Legislation.

Under the head of "Miscellaneous Business," Dr. Storck offered the following resolution, which was adopted:

Resolved, That the report of the Board of Censors be adopted, and the Treasurer of this society be authorized to pay, on the order of the President, to the chairman of the Board of Censors, seventy-five dollars, the amount incurred for expenses in its work, as reported.

Under the same head Dr. Barker offered the following proposed amendments to the By-Laws, viz.:

(1.) To amend Sec. I of Art. 5 so that it shall read: "Every physician or surgeon residing in the county of Erie who may hereafter wish to become a member of this society shall make his application to the Secretary, who shall present it, at a regular meeting, to the society. It shall be referred to the committee on membership, who shall report the result of their investigation, accompanied with a recommendation for or against the applicant, at the next regular meeting of the society. The applicant shall be admitted by a majority vote of the members present."

(2.) To amend Sec. IV of Art. 5 by striking out the words, "pay the Treasurer one dollar," so that the section would read, "Every member, when admitted, shall sign the By-Laws, and be entitled to a certificate of membership."

Under the same head Dr. Gay moved that, inasmuch as the rooms now used by the society are too small to accommodate the large membership, a committee of three be appointed by the President to procure information in regard to rooms for the society's use further down town than the rooms now used by the society, such committee to report at the next regular meeting.

Carried.

The President appointed, as such committee, Dr. C. C. F. Gay, chairman, Dr. U. C. Lynde and Dr. H. R. Hopkins.

Dr. Gay also moved that the Board of Censors be empowered to investigate and inquire into the legality of two institutions in this city, viz.: Dr. Don's dispensary and Mrs. Kimball's maternity home.

Carried.

Dr. Ring suggested that the committee on rooms confer with the Commissioners of the City and County Hall, and see if rooms in that building could be secured for the society's use.

Under the head of "Communications from Abroad," the following communication from the special committee on the State Examining Board of the State Society was received and placed on file :

NEW YORK, May 31, 1884.

To the President of the Medical Society of the County of Erie :

SIR—At the annual meeting of the Medical Society of the State of New York, held in February, 1884, a special committee was appointed for the purpose of preparing a bill relative to the establishment of a State Examining Board, said bill to be presented for the consideration of the State Medical Society in February, 1885.

At a recent meeting of the committee it was resolved to solicit the views of those chiefly interested. To that end you are requested to bring the subject to the attention of the body over which you preside, and to communicate any action it may take in the matter to the undersigned, prior to October 15, 1884.

Yours respectfully,

H. G. PIFFORD,

Chairman Special Committee.

No. 10 W. 35th Street, New York.

After the above communication was read, Dr. Hopkins offered the following resolutions, which were adopted :

Whereas, This society has received a communication from the special committee of the Medical Society of the State of New York appointed for the purpose of preparing a bill relative to the establishment of a State Examining Board, in which that committee solicits the views of this society upon the subject they have in hand; therefore—

Resolved, That the Medical Society of the County of Erie regards the question of a State Examining Board as one of vital and imminent necessity and importance.

Resolved, That it is the belief of this society that such Examining Board should be composed of physicians appointed in the interest of the public, and should be men having no connections liable to conflict with the full and impartial exercise of their duty as examiners.

Resolved, That in the event of the adoption of these resolutions, they be officially transmitted, with the vote adopting the same, to the committee on State Examining Board.

There being no further business before the meeting, on motion of Dr. Lothrop, the society adjourned.

EDWARD CLARK, *Secretary*.

Selections.

THE INFLUENCE OF WORRY AND NERVOUS SHOCK ON THE UTERUS AND ITS FUNCTIONS.

Clinical lecture by Wm. Goodell :

This lady is 37 years old. She has had four children, the youngest of which is nine years old. Her trouble began twelve years ago, but has been worse since the birth of her last child. She complains of pain in the back and head, fluttering of the heart, cold hands and feet, irritable bladder, wakefulness, and when she does sleep has bad dreams, which wake her in a fright.

What is the meaning of these symptoms? They are nervous symptoms. We must decide whether they are due to a local or constitutional disease with a constitutional expression, or whether to a pure nervous trouble. In the first place, I ask her whether she has had any trouble in her family. She tells me that she has had no trouble; she has had a happy home and no cause of worry.

I have a patient who often comes to see me, complaining with these nervous symptoms, and I have repeatedly told her that she must have had some cause of worry or of nervous shock, but she has always denied any such cause until a day or two ago, when she said that possibly a passage in her history might explain the trouble. She said that her father had softening of the brain and became insane, but the insanity was of a passive type. He had never done any one harm until one day when she entered his room, he made a spring at her, and she saw from his expression that he was going to do her harm. She seized some heavy article, exclaiming, "Father, if you come near me, I shall throw this at you," and looking him steadily in the eye, he quailed. In order to get out of the door, she had to turn her back towards him, and the instant she did this, he sprang and caught her and tried to bite and injure her. She shrieked for assistance, which fortunately was at hand. This fright made such an impression upon the nerve-centers that from that time she was never well. This was the foundation of her troubles, although she thought that it had nothing to do with them.

I have had a patient under my care for seven months, suffering from menorrhagia and these nervous symptoms, in whom the trouble was caused by the throwing of a dead cat into her lap. You may ask, how can a dead cat produce menorrhagia? or, in other words, how can a fright produce menorrhagia? It does in this way: It produces a profound impression upon the nerve-centers, and there is no longer that correlation of nerve-

power which exists in health. The nerves behave as they please. There is irregular distribution of nerve fluid; this leads to irregular distribution of blood; more blood goes to one organ than to another. The most exacting organs during the woman's menstrual life are the womb and its annexes, the ovary, the vagina, the erectile tissue around the womb, the broad ligaments and the fallopian tube. They receive more blood than they should. There is increased nutritive action, vegetations develop, and the womb increases in size. In the lady of whom I have spoken, I was unable to cure the menorrhagia. I used the curette and could control the hemorrhage for a time, but it would always return, and ultimately I removed both ovaries. These organs were found to have undergone follicular degeneration.

I shall now make a vaginal examination. I examined her once before, but did not think that any operation was required. There has been a laceration of the cervix and of the perinæum, but these lesions do not usually produce such severe symptoms. She has worn a pessary, but it always caused pain. I must honestly say that I dislike to subject this woman to an operation when I am by no means positive that it will do her good, but I shall do something which I think will modify and tone up the condition of the womb. The sound gives a measurement of three inches. There is no ectropion of the mucous lining of the cervical canal, and that is one reason why I think an operation is not indicated. To-day I shall curette the womb.

Is there any danger in the use of the dull curette? This is an important question, for you will frequently do the operation in your office. I have never lost a patient from the use of the curette, but I have occasionally had some inflammatory disturbance.

There has been a little bleeding following the passage of the sound. I shall first introduce the blunt curette. I remove several vegetations. A few of these are quite large. These

little fungous growths are entirely benign. I have often told you how unreliable the microscopical examination of uterine growths is. The best microscopists have told me that certain growths were epithelioma, when the subsequent course of the case has proven that the disease was perfectly benign. I lately came across a passage in the works of a German writer in which he says that it is one of the most difficult things to decide between benign and malignant growths of the womb by the microscope. The alveoli of innocent growths simulate very closely cylindrical epithelioma. I think that this is the reason that microscopists have been misled.

Having removed so many of these vegetations, I shall go over the endometrium with the sharp curette. This is an instrument I do not advise you to use at first, for your fingers are all thumbs, and you cannot manipulate with the delicacy that is necessary in employing this instrument. I first dilate the canal with Ellinger's dilator, in order that the instrument may readily enter, and then, taking it as I would a pen, I gently pass it into the cavity of the womb. I can hear and feel the curette passing over the rough vegetations. The lining of the womb should be perfectly smooth. Having removed all the vegetations, I shall make an application of strong tincture of iodine to the fundus. She will then be put to bed, and, if necessary, receive an opium suppository.

What shall we give this patient internally? If she were rich enough I should put her to bed, have her well rubbed, and electricity applied. She cannot do this. The next best thing is to give some remedy to tone down these nerve-centers which are not behaving themselves. I should like to give her the valerianate of zinc and quinia, which, take it all in all, is the best combination which we can give. I shall order a triple valerianate, as follows: *R.* Zinci valerianatis, quiniæ valerianatis, ferri valerianatis, aa gr. xx. *M.* et ft. pil., No. xx. *Sig.* One, three times a day.

After a time, I shall give strychnia in small doses, gradually increased. She would, I think, be benefited by the use of malt. Keasbey and Mattison make a good preparation. Of this, she will take a tablespoonful three times a day in milk. It is a good plan to take one dose of the malt at bed-time. This favors sleep. (The patient was now removed.)

I tell you frankly that I do not believe her statement that she has had no trouble; I believe that she has some cause of worry which has aggravated this, for there is not sufficient local trouble to account for the constitutional symptoms.

To illustrate this, let me refer to a case which I saw the other day. A young girl was sent to me with the history of dysmenorrhœa, and all the train of nervous symptoms which the patient before you to-day exhibited. I examined her, and, as a matter of course, found antelexion, but the sound passed readily. The dysmenorrhœa had developed within a few months. I asked her if she had studied hard at school. She said that she had, and had been compelled to leave school. She stated that she had no cause of worry. After she had left the room, the lady who came with her told me that the girl's father, although a good man, was an intemperate one, and that his intemperate habits worried the girl very much. In the great majority of such cases a cause for worryment will be found.—*Medical and Surgical Reporter*.

MEAT.

The value of meat as a food is due in a degree to its heat-producing properties, though in this respect it is surpassed by fatty and amyloid substances. It is as a tissue building material, and as an excitant of assimilative changes in the tissues, both with regard to itself and to non-nitrogenous foods, that it is most useful. It is stimulant as well as nutritive, and it there-

fore holds a deservedly high place in the daily dietary. Experiment has shown that three-quarters of a pound of lean meat fairly represents the quantity per diem which, taken with other less nitrogenous matter, suffices to maintain a person of average size and weight in a normal state of health. Some there are who largely exceed this standard, eating freely of meat at every meal, and living all the time quiet, sedentary lives. Such carnivorous feeders sooner or later pay a penalty by suffering attacks of gout or other disorders of indulgence. But it is equally important to note that many others, especially women, healthy in all points but for their innutrition, are apt to err as far on the other side. Thus one meets with people who consume about a pound of butcher's meat in a week, or not even that. This fact has been fully brought out by Dr. Graily Hewitt, in his address to the Obstetrical Section at the recent meeting of the British Medical Association. He has, likewise, with much probability, assigned this defect of diet as the chief cause of that general "weakness" which is so common among the antecedents of uterine displacement. The experience of many practitioners will confirm his observation. Different causes are at work to produce this kind of underfeeding—too rigid domestic economy, theoretical prejudices, the fastidious disinclination for food which comes of a languid indoor life without sufficient bodily exercise, tight lacing, perhaps, and many more. These difficulties are all more or less removable, unless, indeed, where absolute poverty forms the impediment. No effort should be spared to remove them. The advantages derived from a diet containing a fair amount of solid animal food could not be obtained from a purely vegetable or milk regimen without either unnecessarily burdening the digestive system with much surplus material, or, on the other hand, requiring such revolutionary changes as to quantity and quality of food and times of eating as would probably altogether prevent its general

adoption, even were that desirable, into household management. In our opinion, such changes are not desirable, as being inadequate to secure their purpose.—*Lancet*.

Correspondence.

Editors Buffalo Medical and Surgical Journal:

BUFFALO, JUNE 20, 1884.

Permit me to call attention to a fallacy in the position of the admirers of the term *functional diseases*, as shown in your recent editorial on that subject. It is proper to remark that the discussion to which you refer raised a two-fold objection to the use of this and similar medical terms of no certain sound, in that such terms were faulty in conception and pernicious in use. The evening in question furnished an illustration of such pernicious use.

The paper of the evening, presented by an eminent neurologist and supported by other equally prominent psychiatrists, referred to epilepsy as a chronic functional disease, and proceeded to point out its baleful effects upon reason and life, and in the way of treatment referred to the use of the trephine, of section of nerves, and ligation of the carotids and vertebrals.

In the discussion, it was urged that the term was a poor one for general or frequent use, and that when applied to epilepsy was particularly inappropriate.

The arguments of the minority are probably as well put as may be in your editorial, but would seem to be liable to the following criticism:

There is in your position no apparent recognition of the march of belief concerning the nature of disease from the times

of the fathers, when nearly every disease was regarded as functional, until now, when the existence of such disease is generally denied.

We will, perhaps, avoid confusion by defining the term functional disease, and the remark may well be made that more exactness of definition would probably prevent discussion as to the propriety of its use.

It may reasonably be contended, that if retained at all, the term should be applied to disease having no morbid anatomy, that this is its natural meaning, and it was so used in early times.

To use the term as applied to disorders having no morbid anatomy, detectable by our present means of research, is to abandon the thought for which it originally stood and to put upon it a construction which makes the term a clumsy misnomer. You would then practically say, this is a functional disease, which may be a structural disease, but because we have not discovered its seat or the nature of its structural changes, therefore we say of it, that it is functional, although in so doing we disregard everything which we know of cause and effect and assume that here is an instance of effect without corresponding cause. We will, therefore, conclude that you are anxious to uphold the use of the term "functional disease," as the most appropriate designation of a class of disorders distinguished from others by the fact that they have no antecedent structural changes.

The gist of your argument and the quotations with which you would support it, seems to be that vital functions are exhibited by undifferentiated, structureless protoplasm, and that in a particular case a special instance or kind of protoplasm may exhibit a function so different from the normal in time, mode or degree as to constitute or cause disease, and that inasmuch as the protoplasm has no structure, it therefore can have no

structural change, and the disease in question must be one of function.

You will permit me to remark, in passing, that the above is nearly all there is of the argument in favor of the soundness of the term "functional disease," and is a most glaring and vicious instance of reasoning in a circle.

To be more explicit. Upon page 520 you quote Foster's Physiology to establish the facts that the *amœba* is "almost wholly composed of undifferentiated protoplasm," and that this protoplasm "possesses certain fundamental, vital properties."

Upon page 522 you build upon the foundation thus laid after this fashion: "If an *amœba* composed of *structureless* protoplasm can set free the latent energy stored up in its substance, the difference in its susceptibility to external irritation must be one of function, for structural changes surely cannot occur where structure is absent." There is in this the following fallacy: You substitute *structureless* for undifferentiated.

In familiar conversation it is, perhaps, permissible to use these words as synonymous, but in the serious discussion of a scientific topic nothing could be more improper or faulty.

Herbert Spencer devotes page upon page to the work of acquainting us with the structure of undifferentiated protoplasm, and finds in this peculiar structure the power which shapes not alone the particular function of the part, but the processes of growth, repair and restoration as well. To be sure this structure is not a palpable fact, like the differentiation of the plant into stem, roots, leaves, flowers and seeds, or of an animal into nerves, muscles, blood and bones, but it, nevertheless, has as reliable a foundation as the molecular weights of the different elements.

Structureless, organic matter, capable of exhibiting the highest and most complex functions—capable of growth, of repair,

and of reproduction, is at once the most ambitious and extravagant affirmation and negation, and easily outrivals the conception of the elephant supporting the earth from the back of the turtle. Such a proposition can scarcely be maintained by using words with a meaning altogether apart from that of the author, and although the precise relation of structure and function will doubtless ever remain an unsolved problem, yet every pertinent fact in biology plainly contributes to the support of the induction that complexity of function is the correlative of complexity of structure.

As to how slight a change a tissue must undergo before it can be said to suffer from structural change is probably a question not profitable to discuss, but in this connection it might be mentioned that the test of a normal tissue, or organ, is not applied by taking its weight, color, or microscopic appearance, but in all probability is more appropriately made by observing with what efficiency or otherwise it executes the function with which it is usually associated. As in chemistry matter is estimated by weight, so in physiology function is estimated by adaptation; and every fact in biology teaches us to believe that function is only exhibited by organized matter built up into more or less specialized structures.

Probably enough has been said to make it apparent that more pains must be taken to establish the existence of "structureless protoplasm" before proceeding to generalize upon its phenomena.

H. R. HOPKINS.

METALLIC IMPURITIES IN CANNED MEATS.

Dr. E. Davies (*Pharm. Jour. and Trans.*), says that his attention was recently called to a case of poisoning from eating tinned salmon, the doctor who had charge of the case having attributed

the same to tin nitrate. Of course the chemistry of the medical gentleman was, to say the least, peculiar. Tin nitrate, either stannic or stannous, can only be formed by the action of nitric acid, either on tin or stannous hydrate for stannous nitrate, or on stannic hydrate for stannic nitrate. But there is no nitric acid in the flesh of salmon, and the formation of nitric acid from its nitrogen in the absence of oxygen is a chemical impossibility. Indeed, nitrates of tin are such unstable salts that they could not have endured the heat of preparing the tinned salmon, even if they had been purposely added. Whether tin can be taken up by the oil in which the salmon is cooked seemed, however, a possible thing, forming a fatty salt of tin. He, therefore, analyzed the oil from a tin of preserved salmon, using the cheapest kind. Three hundred grains gave .03 grain of residue on igniting the precipitated sulphides, of which a part was lead and a trace of tin. This amount is insufficient to cause any effect.

Whether tin in such a form is poisonous is not known. The only tin salts which have been known to possess poisonous properties are the stannous and stannic chloride. Stannic chloride, as usually prepared, contains free acid, and its strongly irritant effects may be thus partly accounted for, but these salts are not present in tinned meats. Tin in the metallic form is not at all poisonous, and tinned vessels have been in such constant use for cooking purposes that some cases must have been met with if they could impart deleterious properties to the food. The lead which is almost always present in the tin used for tinning may be supposed to be the active agent. He analyzed tinned beef for this metal and found on the whole of the outside of the meat in a 4-pound tin .07 of a grain. The interior of the meat was quite free from tin. Lead poisoning from small doses does not cause sudden symptoms. Paralysis is the usual result, and not symptoms of irritant poisoning.

The amount above stated is quite insufficient to produce any visible effect, and the removal of the outside would remove any

that might be present. He also analyzed a tin of tomatoes which had apparently suffered partial decomposition. Two ounces gave .10 of residue when the sulphides were ignited. This was principally tin, with a minute amount of lead. The tomatoes were, of course, acid, and acid substances should not be preserved in tinned vessels, but even this quantity is so small that he should hesitate to assume that it could be injurious. The bad effects which have in a few cases resulted from the use of tinned meats are due to decomposition of the meat, owing to imperfect closing or faults in preparation. The results of his examination are that lead should be carefully excluded in the preparation of the tin plate, and that acid liquids should not be kept in tinned vessels, but that no cases are known in which any injurious effects have been proved to have resulted from metallic impurities in tinned meats.

Editorial.

AMERICAN MEDICAL ASSOCIATION.

We are asked to give publicity to the following circular, "prepared for distribution to the various State and County Societies throughout the United States":

At the meeting of the American Medical Association held at Washington in May last, an amendment to Regulation II. was adopted, which provides that—

"Membership in the association shall be obtained by any member of a State or county medical society recognized by the association, upon application endorsed by the president of said society, and shall be retained so long as he shall remain in good standing in his local society, and shall pay his annual dues to the association."

You will perceive that, as far as such opportunities are embraced, the strength of the association will be increased and consolidated, so as to unite the profession, and give it a force and influence not otherwise attainable. Without undertaking, however, to point out the advantages of this action on

the part of the association, or to advocate the plan of which it is a main feature, it may simply be said that, as the new departure has been taken, it is for the association and its constituent bodies to carry it out to the fullest extent, and to give the movement their hearty co-operation.

Toward this end, the first step is to make the action of the association as widely known as possible, and you are, therefore, requested to bring the matter to the notice of your society and its individual members, either by circular, or in such other way as may seem to you most effective for the purpose.

Applications for membership, in the manner specified above, accompanied with five dollars for annual dues, should be sent directly to the treasurer, Dr. Richard J. Dunglison, Lock Box 1274, Philadelphia, Pa., on receipt of which the weekly journal of the association will be forwarded for one year to such member.

This change we would heartily commend.

Under the old rule it was possible to throw obstacles in the way of the admission of worthy applicants for trivial or personal reasons. The adoption of the foregoing resolution puts an end to that, and also practically terminates the existence of permanent membership. Heretofore permanent members have had the privilege of paying the annual dues, but were not entitled to a vote. All from whom the dues are hereafter accepted will stand on an equal footing as active members, and as the payment also entitles them to the weekly journal of the association, the application of the resolution will undoubtedly result in a large increase in the membership, and the consequent increment of influence and effectiveness of the association.

It will, in the same proportion, increase the circulation of the "Journal," which closes the first year of its publication with its issue of June 28th. Both in a financial and literary way it has been a moderate success. Though perhaps not fully equal to the reasonable expectations of its patrons, yet it is a vast improvement upon the old method of an annual volume of "Transactions," and we have a confident hope that in the near future "The Journal of the American Medical Association" will be in the van of American journalism.

NIAGARA UNIVERSITY.

We learn that the medical department of this University has acquired possession of the property on Ellicott street near the corner of Broadway, and immediately opposite to the site upon which will be erected the magnificent buildings for the Young Men's Association and Grosvenor libraries. A more eligible site for the new college could not have been found in the city; not only is it convenient to the hospitals and dispensaries, but also, all of the scientific societies will have their home in the new library buildings, and the proximity of their museum and collection will be of advantage to the students of the Niagara College. A greater advantage, however, will be the ability to make free use of the Grosvenor library and its splendid collection of books of reference. The present location of this library is but half a block away, so that its advantages will be available the coming winter.

The new college building, which it is proposed to immediately erect upon this property, will be ready for occupancy in October. Plans of the building have been submitted by several noted architects, and we are informed that in the one adopted the comfort and convenience of the students will be constantly borne in mind in the arrangement of its rooms, lecture halls and laboratories.

EDITORIAL NOTES.

A FASHIONABLE antiseptic in all the hospitals of New York city is the solution of bichloride of mercury, one part to fifteen hundred or two thousand of water.

DURING the year 1883, 298,153 pounds of manufactured opium for smoking purposes were imported into this country, on which the Government received, at \$6 a pound, a customs revenue of nearly \$200,000,000. The query is, what becomes of all of this opium, and by whom is it consumed?

THE value of tongaline in the treatment of neuralgia and rheumatism is established by many careful observers in this country as well as by Ringer and Murrell of London, England. The use of the preparations of opium in neuralgia, especially, is open to the great danger to the patient of the establishment of the "opium habit." An agent preventing this, and which is almost a specific in the acute forms of neuralgia, is to be welcomed and employed by every physician.

WE desire to call attention to some valuable medicinal preparations which are worthy of receiving greater attention from medical men. Messrs. Wyeth & Bro. are furnishing compressed pills of bisulphate of quinine, which are readily soluble and cannot fail to dissolve when swallowed. We have critically examined the method followed by Wyeth & Bro. in preparing their compressed pills and other pharmaceuticals, with the result of decidedly increasing our previous high opinion of their preparations.

THE hot weather of this and the coming month will bring with it the usual proportion of "pain and trouble," especially among infants and children, due to digestive disturbances. In the majority of these cases, after the proper regulation of the food, we have found the use of some of the pepsin preparations of service. Lactopeptine is perhaps the best to employ; at least, we have never failed to find the preparation effective when a digestive agent was indicated. Composed as it is of pepsin, pancreatic, ptyalin, lactic and hydrochloric acids, it fairly represents the composition of the natural digestive juices, and is undoubtedly superior to pepsin alone.

Reviews.

Elementary Principles of Electro-Therapeutics. For the use of physicians and students. With 135 illustrations. By C. M. HAYNES, M. D. Published by the McIntosh Galvanic and Faradic Co., Chicago, Ill. Price, \$2.00.

This is a book of nearly 500 pages, which, from the number of its illustrations of the McIntosh batteries and electrodes, we

considered, at first glance, to be primarily intended as an advertisement of that enterprising firm. This doubtless was an object in its publication, but it is not offensively apparent. Indeed, the work contains a vast amount of useful information. The elementary principles of magnetism, Franklinism, Galvanism and Faradism are well given, and the foundation principles of the applications of electricity in medicine are well taught. For the physician who wants to get at the practical facts of medical electricity in the easiest way, we know of no work more desirable; and to those who do not make medical electricity a special study, it will serve as a most useful guide to the intelligent use of their batteries.

A Practical Treatise on Surgical Diagnosis. Designed as a Manual for Practitioners and Students of Medicine. By AMBROSE L. RANNEY, M. D., Professor of Practical Anatomy in the New York Post Graduate Medical School, etc. Third edition, thoroughly revised, enlarged and properly illustrated. New York: Wm. Wood & Co. 1884.

The first edition of this work appeared in 1879. That it already has reached a third edition is conclusive evidence of its value. Both the author and the publishers seem determined that it shall continue to deserve professional favor, for the present edition of the work is materially improved by the addition of new chapters upon diseases of the spinal cord and their envelopes, a careful revision of the whole work and the introduction of many excellent illustrations. The plan of the work is, we think, an excellent one, in that for the student the presentation of the symptoms of diseases in marked contrast is an aid to memory, and to the practicing physician it is a convenient reference on questions of diagnosis. We know of no better book of the kind, and its popularity with the profession will undoubtedly continue and increase. The publishers have issued it in excellent form.

Auscultation, Percussion and Urinalysis: An Epitome of the Physical Signs of the Diseases of the Heart, Lungs, Liver and Kidneys. Edited by C. HENRI LEONARD, M. A., M. D., Professor of the Medical and Surgical Diseases of Women, and Clinical Gynecology, Michigan College of Medicine. Fully illustrated. Cloth, 16mo., 166 pages, post-paid \$1 00. Detroit, Mich.: The Illustrated Medical Journal Co., Publishers, 1884.

This little book covers a great deal of ground. It has no less than 163 pages one-half the size of this, and the perusal of the following list of its contents will satisfy the reader as to its value :

CONTENTS—Chap. I.—Topography of the Chest, Anterior and Posterior. Chap. II.—The Physical Diagnosis of Diseases of the Respiratory Organs. Chap. III.—Diagnosis by Percussion. Percussion in Health and Disease. Chap. IV.—Auscultation of the Chest in Health and Disease; also of Voice, Cough and different Rales. Chap. V.—On the Sputa, Microscopical and Macroscopical, with a brief Histology of Lung Structure. Chap. VI.—Diseases of the Lungs; their Pathology and means for Physical Diagnosis. Chap. VII.—On the Pulse; its Rate, Rythm and Sphygmography. Chap. VIII.—The Heart; its Regional Anatomy, Area of Dullness on Percussion in Health and Disease. Chap. IX.—Auscultation of the Heart; the different Cardiac Murmurs and their Indications of Disease. Chap. X.—Diseases of the Heart; their Pathology and Physical Signs. Chap. XI.—The Liver; its Regional Anatomy, Histology, and Physical Signs of the different Diseases. Chap. XII.—The Spleen; its Regional Anatomy, Histology, and Physical Signs of Disease. Chap. XIII.—The Kidney; its Regional Anatomy, Histology, Pathology, and Symptoms of different Diseases. Chap. XIV.—Urinalysis, Chemical and Microscopical; prepared specially for this work by William H. Rouse, M. D., Ph. C. Chap. XV.—Bacteria, Bacilli, Micrococci, Vibriones, and Spirillæ; their Growth, Microscopy, and Agents destructive to them.

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